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ANNUAL REPORT

ON THE

HEALTH

OF THE

COUNTY BOROUGH OF WIGAN

FOR THE YEAR 1933.

HENRY WHITEHEAD, M.D., D.P.H. (Vict)., M.B., B.S. (Lond.),
Medical Officer of Health.
Chief Tuberculosis Officer.
Superintendent School Medical Officer.
Medical Superintendent of Corporation
Hospitals, &c.

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PUBLIC HEALTH STAFF, 1933.

Medical Officer of Health.
Superintendent School Medical Officer,
Administrative Tuberculosis Officer:
HENRY WHITEHEAD, M.D., D.P.H., (Vict.,) M.B., B.S. (Lond.)

Deputy Medical Officer of Health,
Clinical Tuberculosis Officer:
HENRY RICHMOND, M.B., Ch.B., D.P.H.

Assistant Medical Officer—Maternity and Child Welfare (part time):
(Miss) ISOBEL M. SMITH, M.B., Ch.B., D.P.H.

Dentist—Maternity and Child Welfare and Tuberculosis (part time):
C. F. L. PURSLOW, L.D.S. (R.C.S.).

Chief Sanitary Inspector:
FREDERICK MARTLEW (*a*) (*b*).

Sanitary Inspectors:
J. Ashton (*a*) (*b*), V. Jones (*a*) (*b*), T. McKnight (*a*) (*b*), J. Roughan (*a*) (*b*), W. Higgins (*a*) (*b*).

Factory, Workshops, and Shops Inspector: E. Richardson (*a*).

Matron of Sanatoria: Miss L. Rothwell.

Lady Health Visitors:
B. Crompton (*c*)(*d*), M. L. Gold (*a*)(*c*), L. Cook (*c*)(*e*)(*f*) M. E. Wheat (*c*)(*e*)(*f*), M. Mawdsley (*c*) (*e*) (*f*).

Tuberculosis Nurse: L. West (*a*).

Chief Clerk: A. N. Byers.

Clerks:
S. Smith, (until 30th June) R. C. Woods, (from 10th July)
P. Strafford, J. C. Davenport

Tuberculosis Dispensary: A. Fairhurst.

Maternity and Child Welfare Department: M. Miller.

Steam Disinfector Attendant: J. Risley.

Disinfectors: N. Abbott, J. Griffiths, R. MacKenzie.

Motor Driver: L. Hilton.

Part-Time Officers.

Clinical V.D. Officer: Henry Bardsley, M.R.C.S., L.R.C.P.

Orthopædic Surgeon: Henry Poston, M.B., Ch.B., B.A.O., M.Ch.

C. P Brentnall, M.B., Ch.B., Consultant Ante-Natal Clinic.

Employed as Consultants and for the Treatment of Puerperal Fever and Pyrexia:
Robert Buchanan, M.B., Ch.B. William Readman, M.B., Ch.B.

Masseuse: Miss L. Healy.

Public Vaccinators and District Medical Officers:
A. F. Nimmo, M.B., Ch.B. T. S. Acheson, L.R.C.P.&S., I.

Veterinary Surgeon: William Woods, F.R.C.V.S.

Public Analyst: S. Ernest Melling, F.I.C.

Vaccination Officers: R. B. White, S. Turner, J. Bate.

(*a*) Sanitary Inspector's Certificate.
(*b*) Meat Inspector's Certificate.
(*c*) Certificate, Central Midwives' Board.
(*d*) Health Visitor and School Nurse's Certificate
(*e*) Hospital Trained.
(*f*) New Health Visitor's Certificate.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH.

PUBLIC HEALTH DEPARTMENT,
Municipal Buildings,
Library Street,
Wigan.
June, 1934.

To the Mayor, Aldermen and Councillors of the County Borough of Wigan.

Sir, Ladies and Gentlemen,

I have the honour to submit my Annual Report on the health of the Borough and on the work of the Health Department for the year 1933.

This is an "ordinary" and not a "survey" report according to instructions issued by the Ministry of Health, and much of the matter discussed in previous reports has been omitted.

Both the General Death Rate and Infant Mortality are higher than in 1932. This increase occurred mainly in the first quarter of the year, two-fifths of the deaths being due to influenza, pneumonia and bronchitis.

The Zymotic Death Rate remains very low, namely ·38. As this means the mortailty from seven principal infectious diseases, the continued low rate is a pleasing feature of the Vital Statistics of the Borough.

The Maternal Mortality figure is a little lower being 7·08, compared with 8·54 in 1932. It is hoped that less maternal deaths will be recorded in the future as a result of improvements in the service.

The death rate for Pulmonary Tyberculosis remains the same, ·77; but that for non-pulmonary is lower, namely, ·17, compared with ·2 for 1932. These figures compare favourably with those of other industrial areas.

The number of deaths from Cancer is reduced from 107 in 1932 to 102 this year.

The Birth Rate is still falling: 17·8 in 1932 and 16·61 in 1933. The figure for the whole country is 14·4.

General improvements have been made at Whelley Infectious Diseases Hospital, and at Pemberton Tuberculosis Hospital.

It is probable that the proposed extensions to the Health Department accommodation will be commenced at an early date. The great need for this has been stressed so often in these reports that there is no need to report details.

I take this opportunity of thanking all the Members of the Staff of the Health Department for their excellent work during the year, and for their continued loyalty.

I wish to thank also the Chairman of the Health Committee (Councillor Ramsden); the Chairman of the Hospital Sub-Committee (Councillor Mrs. Ashurst), and also the Chairman of the Housing and Insanitary Houses Committee (Alderman Yates) for their confidence and encouragement. My thanks, too, are due to the Members of the Health Committee and of the various committees under whom I serve for their courtesy and support.

I have the honour to be,

Your obedient Servant,

HENRY WHITEHEAD.

1.—NATURAL AND SOCIAL CONDITIONS OF THE AREA.

The County Borough of Wigan covers an area of 5,082 acres, and had a a population at the 1931 census of 85,357. The Registrar General's estimated population on 1st July, 1933, of 85,150, on which figure statistics in this report are based. A considerable portion of the Borough is used for agricultural purposes. These areas are sparsely populated. The average number of persons per acre varies in the fourteen wards within the Borough from 5 to 105, the average being 16·8. The Borough of Wigan forms a considerable part of the valley of the River Douglas. The river is the boundary on the North side, continues its course to the centre and finally becomes the boundary on the West side. The levels on which the river enters and leaves are respectively 150 and 69 feet. Water is taken from the river for feeding the Leeds and Liverpool Canal, which traverses the town. The maximum elevations are at the extreme North 254 feet and at the South-West 260 feet. The lowest level is at the North-western boundary, which is 69 feet.

Geologically, the whole of the Borough rests on the lower coal measures, or Gannister beds, which are here very superficial, and, in fact, outcrop in several parts of the district. The sub-soil is mainly clay which in places has a depth of nearly twenty feet ; but there is an important layer of sand covering a large part of the centre of the town, and extending northwards in the direction of Standish. In other parts sand is found in " pockets." Much of the western portion, beyond the Park, lies on a fairly extensive gravel bed.

The population is essentially an industrial one, the principal industries being coal, iron, cotton, and the manufacture of clothing.

Number of inhabited houses (1931 Census)	18,573
Number of inhabited houses end of 1933, according to rate books	19,376
Number of families or separate occupiers (1931 Census) ..	20,190
Rateable value (1933)	£372,543
Sum represented by a penny rate	£1,423

It is pleasing to state that during recent years there has been a remarkable decrease in drunkenness occurring within the Borough.

Alcoholism, during the six years ending 31st December, 1914, accounted for no less than 23 deaths. Since the year 1921 no deaths have occurred which have been certified as being caused by alcoholism. The yearly average number of prosecutions taken against persons charged with drunkenness during the six years ending 31st Dceember, 1914, was 337, whilst in the six years ending 31st December, 1933, the yearly average number of prosecutions for the same charge had declined to 87.

The local authority possess only one Public Bathing establishment, which is situated in Millgate, Wigan. The accommodation is insufficient for a town with a population of approximately 86,000, especially when it is realised that the great majority of dwelling houses are not provided with a private bath, and when it is remembered that a very large number of the population is engaged in the coal mining industry.

The following list shows the number of Bathers during the past five years :—

	Total No. of Bathers.
1929	143,258
1930	141,629
1931	135,378
1932	167,995
1933	168,303

The Baths Superintendent, Mr. J. H. Cockrell, has kindly supplied me with the following information :—

SUMMARY OF BATHERS AND PARTICULARS OF THE BOROUGH BATHING ESTABLISHMENT FOR YEAR ENDED MARCH 31ST, 1934.

Number of Plunge Baths	2
„ Private Baths	18

BATHERS.

Male Plunge Baths	92,986*
„ Private Baths	7,351
Female Plunge Baths..	35,904†
„ Private Baths	2,167
Mixed Bathing: Adults	8,908
„ Juniors	1,630
Contracts, Free Passes, Season Tickets, etc. ..	19,357
Total	168,303

* This number includes 29,709 boys who are charged 1d., and are admitted after 4 p.m. on each week day except Thursday and Saturday.

† This number includes 9,871 girls who are charged 1d., and are admitted after 4 p.m., on Mondays, Tuesdays, and Fridays, during the summer season.

The above figures show an increase as compared with the previous year, due to the favourable weather conditions.

PUBLIC ASSISTANCE.

The Clerk to the Public Assistance Committee has kindly supplied me with the following information :—

Borough of Wigan.

Year ending.	*Average No. of families receiving relief.*	*Amount paid in relief.*
		£
31st March, 1930	1563 ..	42,714
31st March, 1931	1219 ..	33,714
31st March, 1932	1167 ..	32,291
31st March, 1933	1379 ..	40,287
31st March, 1934	1501 ..	43,497

The Institutions provided are the Frog Lane Institution, for able bodied persons, also a number of old and infirm persons and children under three, which has 309 beds; the Billinge Hospital, Billinge, 369 beds. These institutions receive inmates from the whole of the old Wigan Union, which includes part of the County Area.

NATIONAL HEALTH INSURANCE.

Mr. W. Leyland, the Clerk to the National Health Insurance Committee for the Borough, has kindly supplied me with the following information, with respect to treatment under the National Health Insurance Scheme.

	1929. 1st *Jan.*	1930. 1st *Jan.*	1931. 1st *Jan.*	1932. 1st *Jan.*	1933. 1st *Jan.*
Number of insured persons in Wigan, according to counts of Insurance Committee's Register..	38963	37963	37925	38448	38389
Number of prescriptions issued by doctors ..	172653	152057	156332	158290	176589
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Total cost of prescriptions issued	5844 5 4	4913 1 8	4930 13 11	5002 2 11	5576 11 0
Average cost per prescription issued.. ..	8·13d.	7·75d.	7·572d.	7·58d.	7·58d.

2.—VITAL STATISTICS, 1932—1933.

	1932.	1933.
Population estimated July 1st	85,520	86,150
Births—Males 730 \| Females .. 685 \} Total	1,522	1,415
Annual rate of births per 1,000 on Registrar General's estimated population.	17·80	16·61
Ditto for England and Wales..	15·3	14·4
Ditto, 118 County Boroughs and great towns ..	15·4	14.4
Illegitimate births number 28 or ·33 per 1,000 of population, a percentage of	2·10	1·97
Deaths—Males 621 \| Females .. 600 \} Total	1,141	1,221
Corrected Death-rate, on Registrar General's estimated population	13·34	14·34
Ditto in England and Wales	12·0	12·3
Death-rate in 118 County Boroughs and great towns	11·8	12·2
Excess of registered births over deaths	381	190
Maternal Death-rate	8·54	7·08
Total deaths from seven principal Zymotic Diseases	33	32
Annual rate of mortality from seven principal Zymotic Diseases	·38	·38
Total deaths from Diarrhœa and Enteritis under two years	7	15
Death-rate (per 1,000 births) from Diarrhœa and Enteritis	4·6	10·63
Infantile-rate (deaths per 1,000 births)	92	109
Ditto for England and Wales	65	64
Ditto for 118 County Boroughs and great towns	69	67
Deaths of infants under 1 day old (number) ..	18	24
Ditto 1 year (legitimate) ..	138	150
Ditto 1 year (illegitimate) ..	3	5

Births.—The number of births registered during 1933 is 1415, (males 730, females 685), the rate per 1,000 of the population being 16·61. The birth-rate compared with 1932 is 1·19 lower. The illegitimate births number 28 or 1.97 per cent.

Stillbirths.—The following stillbirths were registered during the year 1933 :—

	M.	F.	Total.
Legitimate	42	33	75
Illegitimate.. ..	1	1	2
Total ..	43	34	77

The Mortality-rate.—The deaths for 1933 number 1,221 (males 621· females 600), being an excess of 21 males over females. The recorded rate per 1,000 of the population per annum is 14·34 ; in 1932 13·34. The increase in the number of deaths as compared with 1932 was 80—and the rate 1.00 per 1,000

EXTRACTS FROM VITAL STATISTICS OF THE YEAR.

	Total.	M.	F.	
Births—(Legitimate) ..	1387	717	670	Birth rate per 1,000 population, 16·61.
(Illegitimate) ..	28	13	15	
	1,415	730	685	

	Total.	M.	F.	
Deaths—	1,221	621	600	Death-rate per 1,000 population, 14·34.

Number of women dying in, or in consequence of, child-birth — from sepsis .. 2; from other causes .. 7

Mortality of women in, or associated with child-birth, per 1,000 children born alive :—

Puerperal Sepsis	1·41	
Other Puerperal causes	4·95	
Total Puerperal mortality		6·37
Non Puerperal causes	–	·70
Total Maternal Mortality		7·08

Infant-Mortality rate under one year of age per 1,000 births :—

Legitimate 108 Illegitimate 178 Total 109

Deaths from Measles (all ages)	10
„ „ Whooping Cough (all ages)	1
„ „ Diarrhoea (under two years of age)	15

INQUESTS AND UNCERTIFIED DEATHS.

The number of Inquests held in Wigan during 1933 was 88, against 81 for 1932, and 98 for 1931, and the following verdicts have been recorded :—

1.	Natural Causes	22
2.	Accidents—burnt	3
	„ scalded	1
	„ colliery	11
	„ drowned	–
	„ falls	8
	„ railway	1
	„ falls downstairs	1
	„ run over	1
	„ knocked down	15
	„ others	7
3.	Suicides—hanging	2
	„ drowned	–
	„ gas	4
	„ poison	3
	„ others	4
4.	Others	4
5	Murder	1
		88

There was 1 uncertified death in 1933, against 3 in 1932, and none in 1931.

Vital Statistics of Whole District during 1933 and Previous Years.

Year.	Pop'tion estimated to middle of each year.	Births.			Total Deaths Registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District.			
		Uncorrected number.	Nett.				of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 year of age.		At all ages.	
			Number.	Rate.	Number.	Rate.			Number.	Rate per 1,000 nett births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1929..	87,600	1,540	1,538	17·56	1,364	15·57	152	103	200	130	1,315	15·01
1930..	87,600	1,583	1,579	18·03	1,134	12·95	160	186	170	107	1,160	13·24
1931..	86,150	1,598	1,598	18·54	1,108	12·86	130	230	165	103	1,208	14·02
1932..	85,520	1,519	1,522	17·80	1,073	12·54	138	206	141	92	1,141	13·34
1933..	85,150	1,411	1,415	16·61	1,136	13·46	142	227	155	109	1,221	14·34

TABLE OF DEATHS DURING THE YEAR 1933 IN THE COUNTY BOROUGH OF

Causes of Deaths.	Deaths at the sub-joined ages of "Residents" whether occurring in or beyond the District.												
	All Ages.	Under 1 year.	1 and under 2.	2 and under 3.	3 and under 4.	4 and under 5.	5 and under 10.	10 and under 15.	15 and under 20.	20 and under 35.	35 and under 45.	45 and under 65.	65 and over
Typhoid and Paratyphoid Fevers	1	..	..	..	..	..	..	..	..	1	..	..	..
Measles	10	4	4	1	..	..	1	..	..	..	..	..	..
Scarlet Fever	3	..	1	..	..	..	1	..	..	..	1	..	..
Whooping Cough	1	1	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	2	..	1	..	..	..	1	..	..	..	..	..	..
Influenza	77	2	2	1	..	..	1	1	2	8	14	33	13
Encephalitis Lethargica	3	..	..	..	..	..	..	..	..	1	..	2	..
Cerebro-spinal Fever	4	1	..	..	1	..	1	..	..	1	..	..	..
Tuberculosis of Respiratory System	65	..	1	..	..	..	..	2	11	26	11	13	1
Other Tuberculous Diseases	15	1	2	2	1	..	1	..	1	5	1	1	..
Syphilis	..	..	..	..	..	..	..	..	..	..	..	..	..
General Paralysis of the Insane, Tabes Dorsalis	1	..	..	..	..	..	..	..	..	..	..	..	1
Cancer, Malignant Disease	102	..	..	..	..	..	..	..	..	1	9	55	37
Diabetes	13	..	..	..	..	..	..	..	1	1	..	6	5
Cerebral Hæmorrhage	77	..	..	..	..	..	1	..	..	3	3	28	42
Heart Disease	190	..	..	..	..	..	2	1	1	9	14	48	115
Aneurysm	1	..	..	..	..	..	..	..	..	..	..	1	..
Other Circulatory Diseases	35	..	..	..	..	..	..	..	..	..	1	10	24
Bronchitis	128	12	3	..	1	..	1	..	1	4	10	39	57
Pneumonia (all forms)	141	43	15	6	6	1	5	2	..	16	12	17	18
Other Respiratory Diseases	11	..	..	..	..	..	1	..	..	..	..	7	3
Peptic Ulcer	4	..	..	..	..	..	..	..	..	..	2	2	..
Diarrhæa &c.	18	14	1	..	..	..	..	1	..	..	..	..	2
Appendicitis	3	..	..	..	..	..	1	..	..	..	..	2	..
Cirrhosis of Liver	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of Liver, etc.	2	..	..	..	..	..	..	..	..	..	..	..	2
Other Digestive Diseases	22	2	..	..	..	1	2	1	..	1	..	10	
Acute and Chronic Nephritis.	20	2	..	..	..	..	..	..	..	3	3	10	2
Puerperal Sepsis	2	..	..	..	..	..	..	..	..	1	1	..	..
Other Puerperal causes	7	..	..	..	..	..	..	..	..	4	3	..	..
Congenital Debility, Premature Birth, Malformations, etc...	72	70	2	..	..	..	..	..	..	..	..	..	..
Senility	80	..	..	..	..	..	..	..	..	..	..	..	80
Suicide	14	..	..	..	..	..	..	..	..	4	2	6	2
Other Violence	35	3	..	..	..	..	4	2	3	10	..	6	7
Other defined causes	56	..	1	2	..	..	5	2	1	8	8	23	6
Causes ill-defined or unknown	6	..	..	..	..	..	..	..	..	1	..	3	2
TOTALS	1221	155	33	12	9	2	28	12	21	108	95	322	424

WIGAN, CLASSIFIED ACCORDING TO DISEASES, AGES AND LOCALITIES.

Deaths at all Ages.

St. George Ward. 1	Lindsay Ward. 2	St. Catharine Ward. 3	St. Patrick Ward. 4	St. Thomas Ward. 5	Poolstock Ward. 6	Victoria Ward. 7	St. Andrew Ward. 8	Swinley Ward. 9	All Saints Ward. 10	West Pemberton Ward. 11	North Pemberton Ward. 12	Central Pemberton Ward. 13	South Pemberton Ward. 14	Total Deaths.
..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
1	..	..	..	..	2	..	1	..	..	..	2	2	2	10
1	..	..	..	..	1	..	1	..	..	..	..	..	..	3
..	1	..	..	..	..	..	..	..	..	..	..	..	..	1
..	..	1	1	..	..	..	..	..	..	..	..	..	..	2
5	7	4	8	5	4	5	9	8	4	2	5	7	4	77
..	1	..	2	..	..	..	..	..	..	..	..	..	..	3
..	1	..	1	..	2	..	..	..	..	..	..	..	..	4
3	3	7	11	3	5	4	13	7	1	2	2	1	3	65
..	1	2	3	2	..	2	3	..	..	..	..	1	1	15
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	1	..	..	..	..	..	..	..	..	..	..	1
4	7	12	11	9	5	3	14	15	5	..	6	4	7	102
1	..	1	1	1	1	..	3	3	1	..	..	..	1	13
2	2	6	8	6	4	4	9	8	2	2	13	5	6	77
16	12	21	25	7	10	6	29	19	6	4	12	15	8	190
..	..	..	..	..	..	..	1	..	..	..	..	..	..	1
2	1	2	5	..	1	..	5	4	2	2	3	5	3	35
6	9	14	29	5	9	10	14	9	4	3	5	7	4	128
15	8	17	17	11	9	9	20	9	4	4	9	3	6	141
..	..	..	1	1	2	..	3	2	1	..	1	..	..	11
..	..	..	1	..	..	..	1	2	..	..	..	..	..	4
..	..	3	2	2	2	2	2	1	..	..	3	1	..	18
..	..	..	..	..	..	..	1	1	..	..	..	..	1	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	1	..	..	..	..	..	1	2
..	2	1	2	..	1	1	4	5	..	2	..	2	2	22
..	3	..	1	1	..	..	3	3	1	..	5	3	..	20
..	..	..	1	..	..	..	..	..	..	..	..	..	1	2
1	..	1	2	..	1	..	..	..	..	..	1	1	..	7
2	5	4	5	3	8	7	12	4	1	2	8	3	8	72
3	7	4	11	5	6	6	8	5	3	4	8	7	3	80
1	..	3	1	1	..	..	4	..	3	..	1	..	..	14
3	2	4	2	2	1	3	9	4	1	..	2	1	1	35
1	..	4	3	3	6	6	9	8	..	2	7	3	..	56
..	1	1	2	..	..	..	1	..	1	..	..	..	..	6
67	73	112	157	67	80	68	180	117	40	29	93	71	67	1221

The death-rate for each quarter is as follows :—

1933	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
All Causes ..	21·06	11·57	9·91	13·98
Zymotics ..	·46	.37	·37	·29

The Zymotic-rate, ·38, is the same as the previous year.

Death Rates, 1933.

Disease.	No. of Deaths.	Rate.
Typhoid and paratyphoid Fevers	1	·01
Measles	10	·12
Scarlet Fever	3	·03
Whooping Cough	1	·01
Diphtheria	2	·02
Influenza	77	·90
Encephalitis Lethargica	3	·03
Cerebro-spinal Fever	4	·04
Tuberculosis of Respiratory System	65	·77
Other Tuberculous Diseases	15	·17
Syphillis	–	–
General paralysis of the Insane, Tabes Dorsalis ..	1	·01
Cancer, Malignant Disease	102	1·19
Diabetes	13	·15
Cerebral Hæmorrhage	77	·90
Heart Disease	190	2·23
Aneurysm	1	·01
Other Circulatory Diseases	35	·41
Bronchitis	128	1·50
Pneumonia (all forms)	141	1·65
Other Respiratory Diseases	11	·13
Peptic Ulcer	4	·04
Diarrhæa, etc. (under 2 years)	15	·18
Appendicitis	3	·03
Cirrhosis of Liver	–	–
Other Diseases of Liver, etc.	2	·02
Other Digestive Diseases	22	·26
Acute and Chronic Nephritis	20	·23
Puerperal Sepsis	2	·02
Other Puerperal causes	7	·08
Congenital Debility, Premature Birth, Malformations, etc...	72	·85
Senility	80	·94
Suicide	14	·16
Other Violence	35	·41
Other defined causes	59	·69
Causes ill-defined or unknown	6	·07
Total	1,221	14·34

Death-rates for Wigan during the Last Ten Years.

1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
14·30	14·47	13·13	14·31	12·62	15·01	13·24	14·02	13·34	14·34

Average for Ten Years, 13·88.

Number of Deaths in Different Wards in Wigan, 1933.

Ward.	Ward No.	Census Population.	Death Totals.	Death Rate.
St. George	1	4,281	67	15·72
Lindsay	2	5,222	73	13·98
St. Catharine	3	6,929	112	16·16
St. Patrick	4	8,571	157	18·32
St. Thomas	5	4,183	67	16·02
Poolstock	6	4,775	80	16·75
Victoria	7	4,745	68	14·33
St. Andrew	8	14,085	180	12·78
Swinley	9	7,880	117	14·88
All Saints	10	2,750	40	14.54
West Pemberton	11	3,740	29	7·75
North Pemberton	12	6,605	93	14·08
Central Pemberton	13	6,129	71	11·58
South Pemberton	14	5,462	67	12·26
Totals	..	85,357	1,221	*14·34

*Death Rate is based on the Registrar General's estimated Population of 85,150.

ZYMOTIC DISEASES.

The Mortality from the seven principal Zymotic Diseases, namely: Small-pox, Scarlet Fever, Measles, Whooping Cough, Enteric Fever, Diphtheria, and Diarrhœa, gives us a rate of ·38 per 1,000 of the population, against ·38 in 1932.

The deaths numbered 32 as against 33 in 1932.

The Zymotic-rate, ·38, is made up as follows:—

DEATH-RATES PER 1,000 :—

	1932	1933
Small-pox	Nil.	Nil.
Scarlet Fever	Nil.	·03
Measles	·26	·12
Whooping Cough	·02	·01
Diarrhœa	·08	·18
Enteric Fever	·01	·01
Diphtheria	·01	·02

DEATHS AND DEATH RATES FROM ZYMOTIC DISEASES FOR THE PAST FIVE YEARS.

	Deaths.	Death Rate.
1929	65 ..	·74
1930	67 ..	·74
1931	23 ..	·26
1932	33 ..	·38
1933	32 ..	·38

COMPARATIVE VITAL STATISTICS SINCE YEAR 1876.

Year.	Birth Rate.	Death Rate.	Zymotic Death. Rate.	Infant Mortality.
1876	48·9	28·5	4·92	186
1886	38·7	22·1	3·1	174
1896	35·9	23·09	4·09	186
1906	32·6	17·61	2·61	160
1916	23·28	15·42	1·04	113
1926	20·03	13·13	·30	103
1933	16·61	14·34	·38	109

REGISTRAR GENERAL'S SHORT LIST OF CAUSES OF DEATH, 1933.

Causes.	Sex.	All Ages.	0–	1–	2–	5–	15–	25–	35–	45–	55–	65–	75–
All Causes.	M	624	91	15	12	21	32	35	44	72	111	129	62
	F.	601	65	20	11	19	22	40	50	47	94	126	107
1. Typhoid and Paratyphoid Fevers ..	M.	1	–	–	–	–	1	–	–	–	–	–	–
	F.	–	–	–	–	–	–	–	–	–	–	–	–
2. Measles	M.	3	3	–	–	–	–	–	–	–	–	–	–
	F.	8	1	5	1	1	–	–	–	–	–	–	–
3. Scarlet Fever	M.	2	–	1	–	–	–	–	1	–	–	–	–
	F.	1	–	–	–	1	–	–	–	–	–	–	–
4. Whooping Cough ..	M.	1	1	–	–	–	–	–	–	–	–	–	–
	F.	–	–	–	–	–	–	–	–	–	–	–	–
5. Diphtheria	M.	2	–	1	–	1	–	–	–	–	–	–	–
	F.	–	–	–	–	–	–	–	–	–	–	–	–
6. Influenza	M.	39	2	2	–	2	3	2	3	7	13	5	–
	F.	41	–	–	1	1	–	5	11	3	11	4	5
7. Encephalitis Lethargica	M.	4	–	–	–	–	1	–	–	1	2	–	–
	F.	–	–	–	–	–	–	–	–	–	–	–	–
8 Cerebro-Spinal Fever ..	M.	2	1	–	–	–	1	–	–	–	–	–	–
	F.	1	–	–	–	1	–	–	–	–	–	–	–
9. Tuberculosis of Respiratory System ..	M.	32	–	1	1	1	7	5	7	6	3	1	–
	F.	33	–	–	–	1	11	12	5	3	1	–	–
10. Other Tuberculous Diseases	M.	11	1	2	–	1	5	2	–	–	–	–	–
	F.	6	–	1	2	–	1	1	–	–	1	–	–
11. Syphilis	M.	–	–	–	–	–	–	–	–	–	–	–	–
	F.	1	1	–	–	–	–	–	–	–	–	–	–
12. General Paralysis of the Insane. Tabes Dorsalis	M.	1	–	–	–	–	–	..	–	–	–	1	–
	F.	–	–	–	–	–	–	–	–	–	–	–	–
13. Cancer, Malignant Disease	M.	52	–	–	–	–	–	–	4	8	20	16	4
	F.	53	–	–	–	–	–	1	5	10	18	13	6
14. Diabetes	M.	4	–	–	–	–	–	1	–	–	1	2	–
	F.	12	–	–	–	–	1	–	–	2	5	4	–
15. Cerebral Hæmorrhage, Etc.	M.	49	–	–	–	–	–	–	2	3	14	21	9
	F.	26	–	–	–	–	–	1	1	6	7	8	3
16. Heart Disease ..	M.	82	–	–	–	1	1	–	5	9	16	35	15
	F.	100	–	–	–	–	3	2	7	6	14	39	29
17. Aneurysm	M.	2	–	–	–	–	–	–	1	1	–	–	–
	F.	–	–	–	–	–	–	–	–	–	–	–	–
18. Other Circulatory Diseases	M.	23	–	–	–	–	–	–	–	1	4	15	3
	F.	10	–	–	–	–	–	–	–	–	6	4	–

REGISTRAR GENERAL'S SHORT LIST OF CAUSES OF DEATH, 1933—Continued.

Causes.	Sex.	All Ages.	0–	1–	2–	5–	15–	25–	35–	45–	55	65–	75–
All Causes.	M.	624	91	15	12	21	32	35	44	72	111	129	62
	F.	601	65	20	11	19	22	40	50	47	94	126	107
19. Bronchitis	M.	65	6	1	–	1	1	3	8	10	14	15	6
	F.	60	6	2	–	–	–	–	2	3	10	21	16
20. Pneumonia (All Forms)	M.	68	22	5	7	3	4	7	6	6	4	3	1
	F.	71	21	10	5	6	1	4	5	3	4	10	2
21. Other Respiratory Diseases	M.	4	–	–	–	–	–	–	–	1	2	1	–
	F.	6	–	–	1	–	–	–	1	–	2	1	1
22. Peptic Ulcer	M.	4	–	–	–	–	–	–	–	3	–	1	–
	F.	2	–	–	–	–	–	–	2	–	–	–	–
23. Diarrhœa, etc... ..	M.	13	10	1	–	1	–	–	–	–	–	1	–
	F.	9	5	1	–	1	–	–	–	–	–	2	–
24. Appendicitis	M.	2	–	–	–	–	–	–	–	2	–	–	–
	F.	3	–	–	–	1	–	–	1	1	–	–	–
25. Cirrhosis of Liver ..	M.	1	–	–	–	–	–	–	–	–	1	–	–
	F.	–	–	–	–	–	–	–	–	–	–	–	–
26. Other Diseases of Liver, etc.	M.	–	–	–	–	–	–	–	–	–	–	–	–
	F.	4	–	–	–	–	–	–	–	–	2	2	–
27. Other Digestive Diseases	M.	10	4	–	1	2	–	–	–	1	–	–	2
	F.	12	–	–	–	–	–	2	–	2	5	2	1
28. Acute and Chronic Nephritis	M.	15	2	–	–	–	–	2	2	4	3	2	–
	F.	8	–	–	–	–	1	1	1	2	1	2	–
29. Puerperal Sepsis ..	M.	–	–	–	–	–	–	–	–	–	–	–	–
	F.	2	–	–	–	–	–	1	1	–	–	–	–
30. Other Puerperal Causes	M.	–	–	–	–	–	–	–	–	–	–	–	–
	F.	7	–	–	–	–	–	4	3	–	–	–	–
31. Congenital Debility, Premature Birth, Malformations, etc. ..	M.	36	34	–	–	1	–	–	–	1	–	–	–
	F.	27	27	–	–	–	–	–	–	–	–	–	–
32. Senility	M.	25	–	–	–	–	–	–	–	–	–	5	20
	F.	49	–	–	–	–	–	–	–	–	–	10	39
33. Suicide	M.	10	–	–	–	–	1	3	–	1	3	1	1
	F.	5	–	–	–	–	–	1	2	–	2	–	–
34. Other Violence	M.	25	3	–	–	4	4	5	–	–	6	3	–
	F.	9	–	–	–	2	–	2	–	–	–	2	3
35. Other Defined Causes..	M.	35	2	1	3	2	3	5	5	7	5	1	1
	F.	34	4	1	1	4	4	3	3	6	4	2	2
36. Causes Ill defined or Unknown	M.	1	–	–	–	1	–	–	–	–	–	–	–
	F.	1	–	–	–	–	–	–	–	–	1	–	–

3.—GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

Professional Nursing in the Home.—The Wigan Branch of the Queen Victoria Jubilee Institute for Nurses commenced activities in February, 1929. To commence with, the Staff consisted of two Nurses, from December, 1930, the number of Staff has been five.

Midwives.—No midwives are employed by the Corporation. Midwives' fees are paid by the Corporation in necessitous cases only, and where Maternity Benefit under the National Health Insurance Acts is not payable. Strict enquiries are made into each case.

There were 40 midwives practising in the district on 1st January, 1933.

Clinics and Treatment Centres.—The following Clinics and Treatment Centres are provided by the Corporation :—

1.	Maternity and Child Welfare Centre, Municipal Buildings, Library Street, Wigan.	Mainly consultative ; treatment to a very limited extent. Open Tuesday and Thursday afternoons, 2 to 4–30. Special Ante-Natal Clinic held second Friday in the month at 2 o'lock. Schools for mothers Wednesday afternoons. The Dentist attends on Tuesday afternoons for examination and treatment of expectant and nursing mothers and infants. Ante-Natal Clinic, 2 to 4-30 p.m. each Tuesday and Special Clinic second Friday in each month at 2 o'clock.
2.	Maternity and Child Welfare Centre, Billinge Road, Pemberton.	Mainly consultative ; treatment to a very limited extent. Open Monday afternoons from 2 to 4–30 p.m. School for mothers on Thursday afternoons.
3.	Maternity and Child Welfare Centre, Platt Lane Mission Room.	Mainly consultative ; treatment to a very limited extent. Open Friday afternoons from 2 to 4–30 p.m. School for mothers held on Tuesday afternoons.
4.	Maternity and Child Welfare Centre, Wesleyan Chapel, Worsley Mesnes.	Mainly consultative ; treatment to a very limited extent. Open Wednesday afternoons from 2 to 4–30 p.m. School for mothers also held on Monday afternoons.
5.	Maternity and Child Welfare Centre, St. Andrew's Mission Room, Woodhouse Lane.	Mainly consultative ; treatment to a very limited extent. Open Tuesday afternoons from 2 to 4-30 p.m. School for mothers held on Wednesday afternoons.
6.	School Clinic, Municipal Buildings, Library Street, Wigan (See No. 1).	For minor ailments. A dentist is in attendance three mornings each week for inspection and treatment of school children.

7.	Orthopædic Clinic, Municipal Buildings, Library Street, Wigan.	For treatment of crippling defects. Open each Monday morning. Surgeon attends once monthly. Cases from Ince and Hindley also attend.
8.	Tuberculosis Clinic, 14, Rodney Street, Wigan.	Open Tuesday, Wednesday, Thursday, and Friday mornings and Friday evenings, as required. A dentist is in attendance on Wednesday mornings for the inspection and treatment of tuberculous persons. Orthopædic clinic held each Wednesday afternoon when there is a masseuse in attendance. Surgeon attends on Saturday morning once every two months.
9.	Radium treatment of Cancer. The Royal Albert Edward Infirmary, Wigan, is a sub-clinic of the Manchester Centre.	The Director of the Radium Institute attends the Royal Albert Edward Infirmary once each month to see cases and attend operations. Special cases to be treated at Manchester.
10.	Artificial Light Clinic, Royal Albert Edward Infirmary	For treatment of suitable cases, by arrangement.
11.	Venereal Disease Clinic, Royal Albert Edward Infirmary, Wigan.	Open Tuesdays and Fridays, 4 to 7 for males only, and from 4 to 7 p.m. on Wednesdays for females and children. "Irrigations" by arrangement. "Inpatient" treatment is also available.

Hospitals Provided or Subsidised by the Local Authority.—The following hospitals are provided by the Local Authority :—

Pemberton Hospital.	For treatment of pulmonary tuberculosis, 28 beds, four of which are reserved for the Lancashire County Council.
Whelley Sanatorium.	For Infectious Diseases (other than smallpox and venereal diseases), 76 beds.
Billinge Infirmary, Billinge.	For medical, maternity and mental cases. 369 beds. There is no resident medical officer. Under the control of the Public Assistance Committee.
Frog Lane Institution.	309 beds are available chiefly for able bodied people. There is also a ward for infectious diseases. There is no resident medical officer. Under the control of the Public Assistance Committee.

The following hospitals and institutions are subsidised by the Local Authority, either by way of (*a*) an annual grant, or (*b*) payment for beds reserved for cases sent by this Authority.

Sankey Small Pox Hospital Near Warrington.	For treatment of smallpox. Payment of £230 per annum
Leasowe Hospital.	Four beds reserved for treatment of surgical tuberculosis. 41/- per bed, per week.

Other Hospitals Available for the District:—

Royal Albert Edward Infirmary, Wigan.	General Hospital. 180 beds. Replete with massage, electrical, orthopaedic, artificial sunlight, and X-ray Departments and pathological laboratory. A certain number of cases of non- pulmonary tuberculosis are treated there, for which payment is made by this Authority. Cases requiring treatment under the Corporation's scheme for dealing with Puerperal Fever are also treated there.

Institutional Provision for Unmarried Mothers:—

St. Margaret's Home, Goose Green, Wigan.	Supported by charities and donations. Grant made by the Local Authority. Accommodation for eight babies and 14 girls.

Ambulance Facilities:—

(a). For Infectious Cases.	One motor ambulance is owned by the Health Department. In addition the motor vehicle used for disinfection purposes can also be used as an ambulance.
(b). For Non-infectious Cases and Accidents.	Two motor ambulances used for accidents, etc., and one motor vehicle used either as an ambulance or prison van, owned by Local Authority. One ambulance owned by the Public Assistance Department, and one saloon car used for transporting mental cases.

MATERNITY AND NURSING HOMES.

On 1st January, 1933, there were two nursing homes and two maternity homes registered. One other Maternity Home was registered during the year.

No action with respect to registration of maternity and nursing homes has been necessary during the year.

COST OF HEALTH SERVICES.

The gross cost of services controlled by the Health and Maternity and Child Welfare Committees for the year ending 31st March, 1933, was £27,311, This is a increase compared with £26,611 for the previous year,

HOSPITAL ACCOM

Hospital.	*Situation.*	*Management.*	*Type of Case.*
Billinge Infirmary.	Billinge.	Public Assistance Committee, County Borough of Wigan.	Mental. Medical Tuberculosis Maternity
Royal Albert Edward Infirmary.	Wigan Lane, Wigan.	Infirmary Board.	Surgical Medical Venereal Diseases Miscellaneous Eye Cases Side Wards Casualty.
Whelley Hospital.	Bradshaw Street, Wigan.	Hospitals Submittee, County Borough of Wigan.	Infectious Diseases.
Pemberton Hospital. *	Billinge Road, Pemberton, Wigan.	Hospitals Sub-Committee, County Borough of Wigan.	Tuberculosis.
Institutions outside Wigan.	Various.		Tuberculosis.
Biddulph Hospital.	Biddulph.	Lancashire County Council.	Orthopædic

* 4 beds (2 for male and 2 for female cases) reserved

MODATION PROVIDED.

Allocation of Beds. M.	F.	C.	*Total.*	*Occupied during* 1933. M.	F.	C.	*Total.*	*Staff.*
67	50	7	124	50	44	7	101	1 Medical Officer, Part-time ;
91	118	13	222	76	87	16	179	Matron.
11	5	—	16	8	—	4	12	Assistant Matron and Home Sister.
—	7	—	7	—	4	—	4	6 Sisters.
			369				296	27 Assistant Nurses. 8 Male Nurses.
69	37	—	106	—	—	—	—	
16	16	3	35	—	—	—	—	
3 M.	or F.	1	4	—	—	—	—	
—	—	26	26	—	—	—	—	
—	5	—	5	—	—	—	—	
—	3	—	3	—	—	—	—	
—	1	—	1	—	—	—	—	
			180					
—	—	—	76	—	—	—	32	Medical Officer of Health is Medical Superintendent.
Ministry's stan	dard		44					Matron. 3 Sisters. 9 Probationer Nurses.
13	15	—	28	12	14	2	28	The Chief Tuberculosis Officer is Medical Superintendent. The Clinical Tuberculosis Officer is Medical Officer. Matron of Infectious Diseases Hospital also Matron of Pemberton Hospital. Sister-in-charge. 2 Probationer Nurses. 2 Night Nurses.
—	—	—	35	20	9	8	37	
—	—	7	7	—	—	7	7	

for patients from the Lancashire County Council Area.

4.—SANITARY CIRCUMSTANCES OF THE AREA.

WATER SUPPLY.

The Borough is supplied with water for domestic and trade purposes from the Arley, Worthington and Pemberton Reservoirs, which have a total capacity of 278,000,000 gallons. Water is also obtained from Nicholson's Well and Nicholson's Pit, Winstanley, and from the Bispham Shaft at Billinge. The Corporation also own reservoirs at Adlington, Pemberton, and Whitley, which are used only for compensation and trade purposes. The gathering grounds from which the greater part of the water is obtained is agricultural land. A complete survey of these gathering grounds was made by the Chief Sanitary Inspector during the year 1922, and later the Medical Officer of Health visited all places where pollutions were discovered, and reported on these to the Water Committee. The sources of the most serious pollutions have in the main been dealt with. Privy middens in rural districts have been converted to pail closets ; many cesspools have been constructed, and are emptied at the expense of the Wigan Corporation. Drains which discharged into the tributaries of the main stream have been diverted into cesspools or septic tanks, and fences have been erected to protect the water from casual personal pollution. The gathering grounds from which the water is obtained are not owned by the Borough of Wigan, and from time to time difficulties will certainly arise with respect to keeping the water reasonably pure. In consequence, the Medical Officer of Health recommended that chlorination plants should be erected at each waterworks, and to-day three chlorination plants are in operation ; one each at Worthington, Edgewood and Bispham. All water is sand-filtered before being chlorinated.,Samples of water are frequently taken for bacteriological and chemical examinations from the various supplies, and from service taps in different parts of the town, and since these chlorination plants have been put in operation every sample examined has proved to be of satisfactory quality. One part of chlorine per $2\frac{1}{2}$ million is added to the water.

In addition to the aforementioned supplies, the Corporation take 500,000 gallons per day of Thirlmere water from the Manchester Corporation, and a further supply of 300,000 gallons per day can be taken during the months of July, August and September. There are approximately 19,095 dwellings within the Borough, and with one or two exceptions each one has its own supply of Town's Water. The total quantity of water supplied for domestic purposes is approximately 1,586,000 gallons per day, and no difficulty has been experienced in recent years in keeping the supply constant with the exception of the drought years of 1929-1930 and 1933-1934 when restrictions in certain parts of the Borough had to be put into operation.

A few dwellings situated near the boundary of the Borough on the south side are supplied with water obtained from the Billinge Urban District Council.

RIVERS AND STREAMS.

The river Douglas and the streams running into it are the natural means of draining the Borough.

The river is badly polluted before entering the Borough, and a certain amount of pollution occurs within. In consequence of mining subsidence it is impossible to keep the sewers in certain areas in a reasonable state of repair. A certain amount of sewage finds its way into the river and streams.

Sewers are repaired frequently, and sludge, etc., is removed from the beds of the river and streams.

DRAINAGE, SEWERAGE, SCAVENGING AND REFUSE DISPOSAL.

Practically the whole of the Borough is sewered and drained. Sewage is conducted by two main outfall sewers, of 27 inches and 36 inches diameters to the sewage works at Hoscar Moss, seven miles distant from the town.

A scheme has recently been submitted to the Ministry of Health for the re-sewering of a district which for many years have been seriously affected by mining subsicence. Approval has been received and it is anticipated that the work will be commenced in the near future. When these new sewers are made, this will prevent the pollution of certain streams, and measures will be taken to convert a large number of privy closets which exist in this area.

I am indebted to the Borough Engineer, Mr. W. Albert Walker, for the following figures :—

During the year 1933 the following amounts of sewage have been treated at the Hoscar Moss and Pemberton Sewage Works :—

Pemberton Storm Water Works ..	177·10	million gallons.
Hoscar Bacteria Beds	896·72	,, ,,
Hoscar Drainage areas	203·20	,, ,,
Total sewage treated	1277·04	,, ,,
Total solids, Detritus Tanks and Screen Chambers, Pemberton	3623	tons.
Total Dried Sludge recovered	4191·8	,,
Daily average Dried Sludge recovered...	11·5	,,
Weight of Dry Sludge per Million Gallons of Sewage	3·3	inches.
Rainfall for year	26·58	,,

PUBLIC CLEANSING.

Mr. Smith, the Cleansing Superintendent, has supplied the following particulars :—

(*a*) Collection of Dry House Refuse by Horse and Mechanical Vehicles, each house having a weekly collection.

(*b*) Collection of refuse from pails and privies by horse and mechanical vehicles. Privies are emptied every three weeks, and pails at least once per week.

(*c*) 85 per cent. of the Dry Refuse is disposed of by Tipping.

(*d*) The contents of privy middens and pails are disposed of to farmers as manure. All pails are washed and disinfected before being put into use again.

(*e*) The contents from cesspools are disposed of on tips.

Provision is being made for a New Cleansing Depot on another site.

The quantity of refuse dealt with by destructors during the year 1933 was 3,588 tons, and the quantity of refuse tipped was 28,764 tons. The Corporation have certain powers which require the owners or occupiers of property to provide, under certain conditions, receptacles of an approved pattern for refuse and already 20,075 ashbins have been provided.

CLOSET ACCOMMODATION.

A general scheme for the conversion of pail closets and privy middens has been in progress in the Borough since March, 1923, with a view to placing all closet accommodation on the water carriage system.

On March 31st, 1923, the number of water closets in the Borough was 8,234, waste water closets 901, pail closets 7,081, privy *middens 1,563. On December 31st, 1933 the estimated number of water closets in the Borough was 21,493, waste water closets 441, pail closets 210, privy middens, 202. The actual number of pail and privy closets which were converted to the water carriage system during the period April 1st, 1923, to December 31st, 1933, was 9,064, and during the same period 178 pail and privy closets were abolished, the total number dealt with being 9,242. 1,150 additional water closets were provided for premises at which the closet accommodation was deemed to be insufficient.

The majority of the 210 pail closets and the 202 privy middens are at unfit houses or premises which are not connected to sewers or in districts where the sewers have been seriously affected by mining subsidence.

The Local Authority commenced a scheme for the conversion of the waste water closets to water closets with proper flushing apparatus. This was inaugurated by the Local Authority on April 1st, 1926, and since that date 460 closets have been converted. 99 of these were converted during the year 1933.

*Note.—The number of privy closets connected to one privy midden varies from one to six, the average being approximately two.

CONVERSION OF PAIL CLOSETS AND PRIVY MIDDENS.

The scheme for the conversion of pail closets and privy middens is now almost completed. The majority of the closets which have not been converted are in districts in which sewers are not available, or where the sewers are unsuitable on account of being affected by mining subsidence. A number also exist at premises which are deemed to be insanitary or are within an insanitary area.

During the year 1933, 5 visits have been made by Inspectors; 25 pail closets and 6 privy closets have been converted. In addition, 6 additional water closets have been provided. The estimated total number of water closets erected in connection with the scheme since January 1st, 1923, is 10,212.

Year.	*Notices Served for Conversion of*		*Total.*	*Conversions carried out.*		*Abolished.*		*Total. dealt with.*	*Notices Served under Section 36, Public Health Act.*	
	Pail Closets.	*Privy Closets.*		*Pail Closets.*	*Privy Closets.*	*Pail Closets.*	*Privy Closets.*		*Closets to be provided.*	*No. of Closets provided.*
1923	1002	1205	2207	565	450	1	–	1016	106	76
1924	2689	649	3338	1908	1138	59	21	3126	230	152
1925	2707	640	3347	2640	573	44	2	3259	675	473
1926	228	99	327	1001	320	26	5	1352	53	293
1927..	5	15	20	203	29	12	–	244	9	90
1928..	11	12	23	63	40	2	3	108	19	26
1929..	–	2	2	2	21	3	–	26	9	13
1930..	6	1	7	20	1	–	–	21	2	15
1931..	31	2	33	33	2	–	–	35	4	5
1932..	23	1	24	23	1	–	–	24	1	1
1933..	25	6	31	25	6	–	–	31	6	6
Total	6727	2632	9359	6483	2561	147	31	9242	1114	1150

SANITARY INSPECTION OF THE AREA.

Mr. Martlew, Chief Sanitary Inspector, submits the following remarks, with a summary of work done by the Sanitary Inspectors:—

The town is divided into five districts. A District Sanitary Inspector is responsible to the Chief Sanitary Inspector for the constant supervision of each District. In addition, an Inspector specialises in the control of factories, workshops (including bakehouses), and shops.

NUISANCES AND OTHER MATTERS DEALT WITH BY THE SANITARY INSPECTORS DURING 1933.

	1933
Houses and premises inspected and visited *re* nuisances and complaints	3357
Re-visits to nuisances	7929
Other visits made	1261
Visits to premises (testing of drainage)	84
Nuisances discovered	5208
Nuisances abated	5056
Notices issued (preliminary)	786
„ „ (formal)	448
Letters issued *re* nuisances	978

DESCRIPTION OF NUISANCES DEALT WITH.

Houses with defective roofs	537
„ with damp and defective walls	1308
„ with defective gutters and down-spouts	474
„ requiring gutters or down-spouts	2
„ with defective windows	611
„ with defective ceilings	151
„ with defective floors	208
„ with unclean walls and ceilings	23
„ with defective slopstones or waste-pipes	97
„ in a filthy condition	2
„ in a verminous condition	—
Defective surface of yards and passages	120
„ drains	63
Blocked drains	209
Defective and foul gullies	43
„ or blocked water-closets	46
„ water-closet flushing apparatus	111
Want of water supply to water-closet	6
Insanitary condition of water-closets	—
Defective or blocked waste-water-closets	4
„ closets (structure)	141
„ ash-houses	—
„ middensteads	9
Accumulation of manure and refuse	16
Animals kept so as to be a nuisance	5
Defective chimney stacks and want of pots	250
Insufficient closet accommodation	1
Miscellaneous	619

SMOKE ABATEMENT.

During the year 67 smoke observations have been taken. In 7 instances the time limit allowed for the emission of dense black smoke was exceeded Two communications were addressed to the persons responsible for the abatement of the nuisances. Visits have been made to premises at which the nuisances occurred, and instructions have been given to stokers as to the best methods of stoking and only causing a minimum amount of smoke. Following suggestions from officers of the Health Department many manufacturers are now using smokeless fuel.

COMMON LODGING HOUSES AND HOUSES LET-IN-LODGINGS

The common lodging houses and houses let-in-lodgings have been regularly visited, and are kept in a satisfactory condition.

Common Lodging Houses.

No. of common lodging-houses in the Borough	10
„ lodgers allowed nightly	470
„ visits	629
„ lodgers reported as being received (per returns)	77,826
„ letters sent out *re* contravention of Public Health Acts or Byelaws	1

Houses-let-in-Lodgings.

No. of houses on register	13
„ visits	156

OFFENSIVE TRADES.

The number of offensive trade premises is eight. They consist of :—

1 fellmonger.
1 fat boiler.
3 gutscrapers.
1 gutscraper and fat boiler.
2 tripe boilers.

11 visits were made to these premises during the year 1933.

RAG FLOCK ACT.

All premises where bedding or furniture is manufactured are visited with a view to finding the kind of flock which is used. Four samples of Rag Flock were submitted to the Public Analyst, and all proved to be up to the standard required.

CANAL BOATS ACT, 1877, AND 1884.

No of Boats that have been registered at Wigan	345
„ still in use or available	45
„ not in use	26
„ broken up	132
„ that cannot be traced, sold, or dispensed with	89
„ registered with other Authorities	18
„ re-registered at Wigan	29
„ registered but not legally required	6
„ Inspections	40
„ Notices issued	–
„ Notices complied with	–
„ Contravention of regulations	–
„ Letters sent out	–

FACTORY AND WORKSHOPS ACT.

No. of Workshops on register	175
„ Bakehouses on register	139
„ Domestic workshops on register	96
„ visits to outworkers premises	17
„ visits to factories	148
„ visits to workshops and workplaces	395

The following defects were dealt with :—

Insufficient sanitary accommodation	1	
Unsuitable or defective sanitary accommodation	14	
Requiring limewashing and cleansing	16	
Other nuisances	5	
Total	36	

No. of defects remedied	36
„ notices received from H.M. Inspector	11
„ letters sent out	16
„ underground bakehouses being used	5

SHOPS (HOURS OF CLOSING) ACT, 1928. SHOPS ACT, 1912.

No. of shops on register	2546
„ visits *re* Shops Act (Day)	1831
„ „ „ „ „ (Night)	67

REPORT OF OFFENCES, 1933.

Not exhibiting closing notice	34
Visits *re* assistants' half-holiday	5
Letters sent out *re* contraventions	3

PLACES OF ENTERTAINMENT.

There are 26 places of entertainment within the Borough, each one is inspected periodically and reports are made on their sanitary condition before the renewal of licences.

RATS AND MICE (DESTRUCTION) ACT, 1919.

Mr. E. Richardson who devotes a portion of his time as Administrative Officer under the above Act, reports as follows :—

No. of premises under observation on 1st January, 1933	34
No. of premises found to be infested during 1933	90
No. of premises reported to be free from rats or mice during 1933	97
No. of premises under observation on 31st December, 1933	27
Total number of visits made during 1933	378

The occupiers of premises still infested are carrying out the requirements of the Act. During Rat Week, held in November, 1933, a special effort was made to exterminate rats and mice. 1,620 baits were prepared and distributed free of charge to persons in occupation of premises infested. Satisfactory results were reported.

SCHOOLS.

The following is an extract from the Annual Report of the School Medical Officer for the year 1933 :—

SCHOOL HYGIENE.

School Premises.

All the new schools and a large number of old ones have separate rooms for the Head Teacher and the Staff. There are unfortunately a few non-provided schools which have neither staff rooms not staff lavatories and School Managers are urged to make this very necessary provision for the comfort of the staff. During the year two new staff rooms have been provided, one as a result of a fall in numbers which freed a small classroom, and the other as a result of a re-allocation of accommodation. The Committee provides furniture, lockers and carpet or linoleum. There is no doubt that pleasant surroundings make for greater efficiency and better health, both in staff and children. This is obvious, for instance, with regard to furniture. It is remarkable that such good work has been done in the past by children sitting in some of the long backless desks, but better work and better health follow when new desks are provided. There is also far less strain upon their eyes and ears in the new classrooms, and very often upon the teachers' voices. The Committee has continued to replace old with new furntiture, and it is expected that the task of re-furnishing will be completed in another twelve months. The policy of re-painting schools every four or five years works well, and with the paint now used it is possible to wash down the walls at frequent intervals so that the colours can be kept fresh. Approved colour schemes are submitted to the teachers, with whom the final choice lies. There are some very pleasant colourings in the schools to-day, and some schools of the oldest and worst type have been made to look modern and pleasant by careful decoration.

5.—HOUSING.

The number of dwellings at the 1931 census was 18,573. The number of families was 20,190, or 1,617 more than dwellings.

The population at the 1931 census was 85,357 and the estimated population on July 1st, 1933, was 85,150.

No. of Houses Built Since 1920.

The number of houses built in :—	*By Private Enterprise.*	*By Local Authority*	*Total.*
1921	2	28	30
1922	18	107	125
1923	23	—	23
1924	24	50	74
1925	130	10	140
1926	73	106	179
1927	115	196	311
1928	89	182	271
1929	82	162	244
1930	34	135	169
1931	107	41	148
1932	102	—	102
1933	221	78	299
Total	1020	1095	2115

1020 built by private enterprise.

1095 built by local authority.

The number of houses in course of erection by the Local Authority at 31st December, 1933, was 170.

During the period 1921–1933 about 220 dwellings have been demolished or ceased to be used as dwelling houses.

HOUSING.

From the Census figures it will be found that no less than 502 families occupied only one room per family, the number of persons in these families varied from 1 to 10. 2, 284 families occupied two rooms per family, and of these no less than 540 families consisted of from 5 to 12 persons. 2,699 families occupied three rooms per family, and of these 332 families consisted of from 7 to 15 persons. 6,275 families occupied four rooms and of these 231 consisted of from 9 to 14 persons. The number of families living in houses with more than two persons per room density (which is a recognised standard of overcrowding) was 1,433 and the number of persons in these families was 9,486. The average number of persons per room in the whole of the Borough of Wigan is 1·00, which is the highest in the County Boroughs in Lancashire with one exception.

The above statistics definitely prove that there is serious overcrowding, and demonstrate the necessity for the provision of at least 1,168 houses (the number recommended in the five years' programme, and approved by the Council in December, 1930). This figure includes approximately 500 houses to replace houses only fit for demolition. During the past two years the number of caravan dwellings has practically doubled. In December, 1930, 80 existed, whereas there are at the time of writing about 160. The increase is mainly due to lack of housing accommodation.

On the 25th September, 1933, a housing programme was submitted to the Insanitary Houses and Conversions, and Housing Committees, of action to be taken during the five years 1934-38.

This programme includes the demolition of 458 houses occupied by 2,906 persons, and attention was also called to the fact that there were 172 back-to-back houses in the Borough, and 17 other houses which in their present condition cannot be considered fit for human habitation, but can be utilised for the improvement of adjoining houses.

In addition, there are 160 van iwellings in the Borough. Housing accommodation should be provided for the persons who occupy these dwellings.

During the months of October, November, and December, 17 houses were reported as being unfit for human habitation, and not capable at reasonable expense of being rendered fit.

Early in October, 1933, the local authority commenced the erection of 170 houses under the Housing Act, 1924. The whole of these houses are now occupied and they have to some extent, relieved overcrowding.

Many houses in the Borough are still occupied by two or more families, and further accommodation is still required.

INFORMAL PROCEDURE ADOPTED IN THIS BOROUGH WITH RESPECT TO IMPROVING INSANITARY HOUSES WHICH CAN BE MADE FIT FOR HUMAN HABITATION.

Insanitary properties are reported to the Insanitary Houses Committee who authorise the Medical Officer of Health to forward to the responsible party a specification of the work required to be carried out to put the house in a reasonable state for human habitation, and later the Medical Officer of Health interviews the party concerned, with a view to ascertaining what he is prepared to do. Little difficulty has been experienced in getting the necessary repairs carried out. The specification usually covers all interior and exterior repairs to the houses; the conversion of the closet accommodation to the water carriage system; the provision of regulation dustbins, the rendering impervious of the surface of the yard, or a portion thereof, according to the size of the yard, and, if necessary, the relaying of the drains. By this informal action 1,155 houses, which were in an insanitary condition, have been rendered fit for human habitation since January 1st, 1921.

TABLE SHOWING THE PERCENTAGES OF INSANITARY HOUSES; THE AVERAGE NUMBER OF PERSONS PER ACRE, THE AVERAGE NUMBER OF PERSONS PER DWELLING, THE NUMBER OF SEPARATE DWELLINGS, AND THE NUMBER OF SEPARATE FAMILIES AT THE 1931 CENSUS IN EACH WARD.

Ward.	*Population.*	*Percentage of Insanitary Houses.*	*No. of Persons per Acre.*	*No. of Occupants per Dwelling.*	*No. of Separate Dwellings.*	*No. of Separate Families.*
No. 1.—St. George	4281	6·3	87	4·8	880	1049
No. 2.—Lindsay	5222	0·9	30	4·4	1172	1241
No. 3.—St. Catharine	6929	1·6	30	4·7	1462	1643
No. 4.—St. Patrick	8571	0·6	98	4·8	1766	1927
No. 5.—St. Thomas	4182	10·6	60	4·8	859	1006
No. 6.—Poolstock	4774	3·5	23	4·1	1138	1158
No. 7.—Victoria	4747	6·8	101	4·7	991	1045
No. 8.—St. Andrew	14083	0·1	20	4·1	3374	3458
No. 9.—Swinley	7880	3·6	16	3·9	1986	2034
No. 10.—All Saints	2756	3·3	17	4·1	661	709
No. 11.—West Pemberton	3740	12·6	5	4·3	852	899
No. 12.—North Pemberton	6605	2·7	14	4·3	1512	1568
No. 13.—Central Pemberton ..	6129	1·2	12	4·3	1420	1497
No. 14.—South Pemberton	5458	2·1	4	4·6	1171	1358

1.—*Inspection of Dwelling-houses during the Year :*

(1)	(*a*)	Total number of dwelling-houses inspected (for housing defects under Public Health or Housing Acts)	3639
	(*b*)	Number of inspections made for the purpose ..	13710
(2)	(*a*)	Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925..	3509
	(*b*)	Number of inspections made for the purpose ..	6142
(3)		Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	47
(4)		Number of dwelling-houses (exclusive of those referred to under preceding sub-head) found not to be in all respects reasonably fit for human habitation	2099

2. *Remedy of Defects during the Year without Service of Formal Notices :*

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	1531

3.—*Action under Statutory Powers during the Year :*

A.—Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930 :

(1)	Number of dwelling-houses in respect of which notices were served requiring repairs	Nil.
(2)	Number of dwelling-houses which were rendered fit after service of formal notices :	
	(*a*) By owners	Nil.
	(*b*) By local authority in default of owners ..	Nil.

B.—Proceedings under Public Health Acts :

(1)	Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	506
(2)	Number of dwelling-houses in which defects were remedied after service of formal notices :	
	(*a*) By owners	598
	(*b*) By local authority in default of owners ..	Nil.

C.—Proceedings under Sections 19 and 21 of the Housing Act, 1930:

(1) Number of dwelling-houses in respect of which Demolition Orders were made.	20
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	14

D.—Proceedings under Section 20 of the Housing Act, 1930:

(1) Number of separate tenements of underground rooms in respect of which Closing Orders were made	1
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	Nil.

BYE-LAWS RELATING TO TENTS, VANS AND SHEDS.

Scattered about the Borough there are approximately 160 van dwellings and difficulty has been experienced since 1919 with respect to the tenants complying with the requirements of the local bye-laws. There is no doubt that this is due solely to the shortage in the number of houses.

6.—INSPECTION AND SUPERVISION OF FOOD.

MILK SUPPLY.

MILK AND DAIRIES (AMENDMENT) ACT, 1922.

DAIRIES, COWSHEDS, AND MILKSHOPS ORDER, 1885.

The numbers of persons registered under the above enactments are as follows:—

Dairymen		157
Premises within Borough	114	
Premises outside Borough	43	

Purveyors of bottled milk only 358

Wholesale Dealers 61
(10 of whom are producers. in the Borough.)

Producers 23

Milk (Special Designations) Order.

Number of persons licensed for the sale of pasteurised milk 42

Number of persons licensed for the sale and production of pasteurised milk 2

Number of persons licensed for the sale of Grade A Milk 1

Approximately 280 milch cows are kept in the Borough. With a few exceptions the cowsheds are in a satisfactory condition.

Number of visits to Cowsheds 166

Number of visits to Dairies 291

Number of visits to Milkshops 1059

MILK AND DAIRIES ORDER, 1926.

Since the above order came into force much time has been spent with a view to improving the milk supply.

Visits are made to dairies etc. for the purpose of examining milk on arrival.

During the year 161 samples were taken for the purpose of testing the amount of foreign matter contained in milk intended for sale in the Borough. These samples were obtained at dairies.

One letter was written to a farmer respecting a sample of milk considered to be below a reasonable standard of cleanliness.

Mr. Woods, the Veterinary Inspector, makes the following report:—

During the year the usual quarterly visits amounting to 112 in all have been paid to the 28 cowsheds within the County Borough and the cattle examined. Six cases have been dealt with under the Tuberculosis Order, and after postmortem examination the appropriate compensation paid. As the Government pays 75 per cent. of the compensation and the County Borough receives the salvage amount, the result has been that it has cost the Corpora-

tion nothing. It is interesting to note that over 2,000 bovine animals are killed throughout the country every month under this Order, the most heavily affected Counties are Cheshire, Shropshire, Yorkshire (West Riding) and Staffordshire. Lancashire with about 70 per month being usually fifth on the list. Although this Order has been in force since 1925, no progress has been made towards the ultimate stamping out of the disease. The Government is now apparently contemplating some new regulations, by which "accredited herds," that is herds certified free from tuberculosis are to receive a guaranteed increase in the price of their milk from Government sources. The County Borough has been gratifyingly free from other contagious diseases. One outbreak of Swine Fever from pigs recently purchased at the weekly auctiou being the only outbreak of this disease. Sheep scab has been very prevalent throughout the country, and I have been instructed to watch for its introduction here, but none has been discovered, which is not surprising as most of the sheep coming into Wigan are brought from Markets where they have already been inspected, and are nearly all for slaughter within a few days.

Two cases of cows, quite unfit for food, have been sent to the Auction and satisfactorily dealt with in conjunction with the auctioneers. The statutory limewashing of the cowsheds has been efficiently carried out and also the disinfection necessary after dealing with tuberculous animals.

BACTERIOLOGICAL EXAMINATIONS OF MILK.

RESULT OF EXAMINATION.

Type of Milk	*Total No. of Samples*	*No. of Bacteria found per c.c.*				*Presence of B. Coli.*				
						Absent in		*Present in*		
		Under 10,000	*10,000 to 100,000*	*100,000 to 500,000*	*Over 500,000*	*1·0 c.c.*	*0·01c.c.*	*·01c.c.*	*·1c.c.*	*1·0c.c.*
Fresh Milk	66	12	36	16	2	18	–	18	17	13
Pasteurised Milk ..	5	1	4	–	–	4	–	–	–	1

PRESENCE OF T.B.: INOCULATION TEST.

	No. of Samples submitted.	*T.B. not found.*	*T.B. found.*
Milk	97 ..	87 ..	10

BACTERIOLOGICAL EXAMINATIONS OF ICE CREAM.

4 samples were submitted for examination, with the following results :—

NUMBER OF BACTERIA PER C.C.

Under 50,000.	50,000 *to* 250,000.	*Over* 250,000.
2	--	2

NUMBER OF AEROBIC BACTERIA PER C.C.

Under 50,000.	50,000 *to* 1,000,000.	*Over* 1,000,000.
1	1	2

PRESENCE OF B. COLI.

Not found.	*Present in :*	
30 *c.c.*	1/10 *c.c.*	1/100 *c.c.*
1	2	1

PRESENCE OF STREPTOCOCCUS FAECALIS (ENTEROCOCCUS).

Present in :	
1/10 *c.c.*	1/100 *c.c.*
2	2

MEAT INSPECTION.

The Chief Sanitary Inspector and five District Inspectors are all qualified Meat Inspectors. There are within the Borough 17 slaughter-houses, 14 are registered and three licensed. District Inspectors examine carcases slaughtered within their own districts. Meat which has been slaughtered in rural districts, and which, there is reason to believe, has not been submitted for examination, is examined as far as possible immediately after its arrival in the town. Premises which come within the Public Health (Meat) Regulations, 1924, are frequently visited. Meat and offal condemned is destroyed at the Miry Lane Depot. In certain instances condemned carcases have been allowed to be sent to a fat melters for manufacturing purposes. In these cases an Inspector is always present when the carcase is put into the digester. Shops, stores, and vehicles are constantly inspected.

PRIVATE SLAUGHTER HOUSES IN USE IN THE AREA.

	On 31st December, 1920.	*On 31st December, 1933.*
Registered	24	14
Licensed	1	3
Total	25	17

No. of visits to Slaughterhouses	5482
„ „ Markets	330
„ „ Butchers' and other food shops	1201
„ letters sent out	—
„ Certificates issued (condemned food)	538

CARCASES EXAMINED DURING THE YEAR 1933.

	Beasts.	Calves.	Pigs.	Sheep.	Total.
Carcases examined	9,085 ..	3,007 ..	12,020 ..	7,190	41,902
Carcases totally condemned	206 ..	22 ..	43 ..	14	285
Percentage totally condemned	2·27 ..	0·61 ..	0·36 ..	0·08	0·68

The following meat and offal from private slaughter-houses was surrendered and destroyed, or sold for manufacturing purposes, during the year 1933 :—

	Whole Carcase and all Offal Condemned	Part of Carcase Condemned	Offal Condemned.									
			Heads.	Lungs.	Livers.	Hearts.	Stomachs	Spleens.	Kidneys.	Udders.	Mesenteries.	Skirts.
Affected with Tuberculosis :												
Beasts	176	180	1183	3332	647	137	385	130	288	74	769	612
Calves	9	–	–	12	12	12	–	–	–	–	–	–
Pigs	21	2	1161	532	356	500	124	34	35	–	205	18
Sheep	1	–	–	–	1	–	–	–	–	–	–	–
Affected with other Diseases, etc. :												
Beasts	30	–	21	343	2171	10	8	8	303	169	10	11
Calves	13	–	–	1	1	1	–	–	1	–	–	–
Pigs	22	–	5	92	148	54	5	–	6	–	1	–
Sheep	13	–	1	–	19	–	–	–	–		–	–
	285	182	2371	4312	3358	714	522	172	633	243	985	641

OTHER FOOD.

All known premises at which food is manufactured for sale are inspected, but the time has arrived when legislation should require all such places to be registered and approved of before a business is commenced therein. It is not uncommon to find businesses for the manufacture of cooked meats, ice cream, etc., to have been commenced in premises that are either insanitary or unclean.

A large wholesale business in fish and other foodstuffs is carried on in and around the markets, and these premises are visited daily.

FRIED FISH SHOPS.

109 premises in the Borough used for the purpose of fish frying, all of which were kept under observation.

SUMMARY OF OTHER FOOD CONDEMNED 1933.

Other meat and offal	..1238 lbs.
„ packages of wet fish condemned	.. 821½
„ packages of dried fish condemned	.. 397
No. of rabbits, fowl and game condemned.. ..	..2016
No. of packages of fruit and vegetables condemned ..	52

FOOD AND DRUGS (ADULTERATION) ACT, 1928.

Two samples of milk were certified as being adulterated, as they were deficient in fat to the extent of 11·3, and 18 per cent. respectively. Letters of warning were sent in each case.

Samples Taken During the Year 1933.

Articles.	*Number.*	*Genuine.*	*Adulterated.*	*Not formal.*
Milk	118 ..	116 ..	2 ..	1
Cream	13 ..	13 ..	– ..	13
Condensed Milk	5 ..	5 ..	– ..	5
Butter	15 ..	15 ..	– ..	1
Lard	4 ..	4 ..	– ..	–
Margarine ..	8 ..	8 ..	– ..	–
Dripping ..	4 ..	4 ..	– ..	4
Jam	10 ..	10 ..	– ..	10
Tea	10 ..	10 ..	– ..	3

Articles.	*Number.*	*Genuine.*	*Adulterated.*	*Not formal.*
Coffee	8 ..	8 ..	– ..	–
Whiskey ..	3 ..	2 ..	1 ..	2
Rum	3 ..	1 ..	2 ..	2
Brandy	2 ..	2 ..	– ..	2
Gin	2 ..	2 ..	– ..	2
Sausages ..	6 ..	6 ..	– ..	6
Mixed Fish or Meat Paste..	7 ..	7 ..	– ..	7
Tinned Peas ..	4 ..	4 ..	– ..	4
Pepper	3 ..	3 ..	– ..	3
Vinegar.. ..	4 ..	4 ..	– ..	4
Cheese	7 ..	7 ..	– ..	3
Beans	1 ..	1 ..	– ..	1
Total	237 ..	232 ..	5 ..	73

Milk and Cream not sold as Preserved Cream.

	(*a.*) *Number of Samples examined for the presence of a Preservative.*	(*b*) *Number in which preservative was reported to be present, and percentage of Preservative found in each Sample.*
Milk	118	Nil.
Cream	13	Nil.
Condensed Milk..	5	Nil.

MERCHANDISE MARKS ACT.

All premises where imported articles of food is sold are kept under observation, and during the year 1933 321 visits were paid to wholesalers and and retailers premises.

FERTILISERS AND FEEDING STUFFS ACT, 1926.

Ten samples of Feeding Stuffs and eight samples of Fertilisers were taken and submitted to the Agricultural Analyst, who reported that in seven samples there was a slight excess of certain chemical substances ; in one sample the sample contained 50 per cent. more oil, and almost double the quantity of albuminoids, and another sample contained 2·3 per cent. less albuminoids as compared with the statutory statements.

CHEMICAL WORK.

The Borough Analyst, Mr. S. E. Melling, F.I.C., submits the following report of the work carried out during the year ending 31st December, 1933

County Borough of Wigan.

Summary of Public Analytical Work Carried Out during the Year ended 31st December, 1933.

ANNUAL REPORT OF THE PUBLIC ANALYST.

Chemical Laboratory,

The Cliff,

Higher Broughton,

Manchester.

20th June, 1933.

To the Chairman and Members of the Health Committee of the County Borough of Wigan.

Sir and Gentlemen,

I have the honour to submit a brief resume of the analytical work of your Department carried out during the year ending 31st December, 1933.

Food and Drugs (Adulteration) Act, 1928.

The total number of samples of food and drug submitted (including articles taken without the formalities of the Act) was 237. These comprised 118 milks, 15 butters, 13 creams (including the tinned variety), ten each of tea and jam, eight each of margarine and coffee, seven cheeses, six suasages, five condensed milks, four each of vinegar, meat and chicken paste, dripping ,peas and lard, three each of whisky, rum and pepper, two each of brandy and gin, and one each of tinned beans, pork, and beans, sardines and tomato, and fish paste. Ten samples were reported against as either adulterated or not complying with official Regulations, viz., four milks, two rums and one whisky. All the former were concerned with more or less fat-deficiency, whilst the spirits were broken down beyond the legal limit of 35 degrees under proof.

The percentage of adulteration thus works out at a shade under 3 per cent., which is not materially different from last year's record, and a manifest improvement upon what has been found in the past. Indeed the figure is much lower than the average for the country, and, in this relation, Wigan stands high in the list of County Boroughs throughout the land.

Details of the composition, when called for, have been given in the various Quarterly Reports, and, generally speaking, a satisfactorily high standard of commercial quality has been maintained, and there is no single instance to report of any failure to comply with the several Public Health Regulations or of any statutory obligation as to labelling, etc.

Fertilisers and Feeding Stuffs Act, 1926.

The accustomed samples—eight in number—of fertilisers (compounded by local manufacturers) were examined and the essential components were in close agreement with the figures set out in the respective statutory statements. Of ten feeding stuffs, two were found to be at slight variance (after making due allowance) with the declarations given, but in neither case was it deemed necessary to proceed further.

Rag Flock Regulations, 1912.

Four samples contained within the limit of Soluble Chlorine laid down (30 parts per 100,000) and were thus of the required degree of cleanliness.

Beyond the monthly survey of quality of the various Public Supplies in the Borough, frequent attention has been given to the water in circumstances whenever deemed necessary by either the Public Health or the Waterworks Department. There are two aspects of this important problem, and, whilst the bacteriological side has received the necessary attention, your Analyst has concerned himself mainly with the question of local variation in the organic state of each individual supply. To some extent the " shift " in quality is governed by seasonable conditions, but, whatever the fluctuation in the " indices of contamination " (using the latter word in no sinister sense), it cannot be too strongly emphasised that the consumer is supplied with wholesome water and by the installation of suitable remedial measures and the frequent control adopted, your Analyst is of the decided opinion that there is no justification for anxiety on the part of the individual.

In conclusion, I desire to acknowledge my indebtedness to my colleagues in the team work which is so essenrial in this branch of the public service and, finally, to your Committee which has never faltered in its sustained interest and support of the technical administration of the Public Health Department.

I am, Sir, and Gentlemen,

Yours faithfully,

S. Ernest Melling, F.I.C.,
Public Analyst.

BACTERIOLOGICAL EXAMINATIONS OF WATER.

During the year 27 samples of water were sent to the Public Health Laboratory, University of Manchester, for Bacteriological examination.

The results of these examinations are set out below :—

Source of Supply.	Total No. of Samples.	RESULTS OF EXAMINATION.					
		No. of Bacteria found per c.c.		Presence of B Coli.			
					Present in		
		Under 100.	100 to 500.	Absent in 100 c.c.	1 c.c.	10 c.c.	100 c.c.
Edgewood and Nicholson's Pit..	2	1	1	2	–	–	–
Edgewood	5	4	1	4	1	–	–
Nicholson's Pit ..	3	3	–	3	–	–	–
Worthington and Thirlmere, mixed	4	3	1	1	–	1	2
Thirlmere only ..	5	3	2	2	1	1	1
Worthington only ..	5	3	2	5	–	–	–
Bispham	1	–	1	1	–	–	–
Streams (supplying reservoir)	2*	–	–	–	2	–	–

* Note the bacteria counts for these samples were 39,550 and 53,375 per c.c. respectively.

7.—PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASES.

Cases of Infectious Disease Notified during the Year, 1933.

Name of District—Wigan County Borough.

Notifiable Disease.	Number of Cases Notified.													Total Cases notified in each locality (*e.g.*, Parish or Ward) of the district.													
	At all ages	At Ages—Years.												St. George	Lindsay	St. Cath	St. Patrick	St. Thomas	Poolstock	Victoria	St. Andrew	Swinley	All Saints	West Pem.	North Pem.	Central Pem.	South Pem.
		under 1	1 and under 2	2 and under 3	3 and under 4	4 and under 5	5 and under 10	10 and under 15	15 and under 20	20 and under 35	35 and under 45	45 and under 65	65 and over	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Smallpox	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Scarlet Fever	240	2	4	11	23	14	107	52	15	10	–	2	–	7	20	20	20	4	9	10	39	20	8	5	30	33	15
Enteric Fever ..	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diphtheria (including Membraneous Croup	25	–	4	1	3	1	7	3	1	3	1	1	–	1	4	4	3	–	1	1	4	2	–	4	–	1	–
Pneumonia	253	24	23	17	15	7	56	19	9	22	18	31	12	11	15	21	25	19	19	21	44	21	9	4	21	12	11
Puerperal Fever ..	2	–	–	–	–	–	–	–	–	2	–	–		–	–	–	–	–	–	–	–	1	–	–	–	1	–
Influenzal Pneumonia	50	–	4	1	1	–	3	2	2	11	12	12	2	5	4	3	6	–	3	1	7	2	–	3	7	5	4
Malaria		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chicken-pox	240	9	11	14	22	26	136	18	2	1	1	–	–	2	10	6	14	12	20	4	57	28	21	14	2	11	39
Erysipelas	52	1	1	1	–	–	2	1	3	11	6	18	8	1	4	5	3	–	1	2	12	5	2	2	4	7	4
Ophthalmia Neon. ..	2	2	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1	–	–	–	–	–	–
Encephalitis Lethargica	1	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Pul. Tuberculosis ..	79	–	1	–	–	1	6	5	11	30	13	12	–	5	4	6	11	4	6	9	11	5	3	4	4	2	5
Other Forms of Tuberculosis ..	56	3	3	3	1	8	6	8	9	10	2	3	–	3	3	6	8	3	2	8	14	2	–	1	2	3	1
Measles	961	47	87	119	121	136	441	7	2	–	1	–	–	25	24	17	16	17	26	55	64	24	8	83	193	190	219
Puerperal Pyrexia ..	7	–	–	–	–	–	–	–	–	7	–	–	–	–	–	–	1	1	–	–	1	–	–	1	1	–	2
Acute Poliomyelitis ..	11	1	3	1	1	1	2	1	–	1	–	–	–	–	1	2	1	1	1	1	1	–	2	1	–	–	–
Cerebro Spinal Meningitis	9	1	2	–	1	1	1	1	1	1	–	–	–	–	1	–	2	–	3	–	1	1	1	–	–	–	–
Pemphigus Neonatorum	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dysentery	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Totals	1988	90	143	168	188	195	767	117	55	109	54	80	22	60	91	90	111	61	91	112	256	111	54	122	264	265	300

Number of Notifications, compared with other years :—

Disease.	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Smallpox	0	0	0	34	13	7	0	1	0	0
Polio-Encephalitis	0	1	0	0	0	0	0	0	0	0
Scarlet Fever	77	64	67	78	179	559	203	100	72	240
EntericFever	19	5	4	1	7	5	1	1	5	0
Continued Fever	0	0	1	0	0	0	0	0	0	0
Diphtheria	25	45	18	34	19	42	107	43	32	25
Puerperal Fever	2	3	3	4	3	5	7	0	1	2
Erysipelas	40	42	28	56	49	40	42	38	41	52
Ophthalmia Neonatorum	5	16	6	10	6	8	5	9	4	2
Acute Poliomyelitis	0	0	3	0	1	1	1	1	1	11
Cerebro-Spinal Meningitis	1	0	0	1	0	1	0	3	4	9
Measles	0	213	46	2486	93	917	1481	26	1565	961
Pulmonary Tuberculosis	123	127	126	126	142	115	91	102	83	79
Other Forms of Tuberculosis	76	65	62	57	65	38	52	62	43	56
Pneumonia	257	236	275	276	257	325	216	232	208	253
Influenzal Pneumonia	41	15	34	43	10	29	13	34	19	50
Dysentery	2	0	0	0	0	0	1	0	0	0
Malaria	0	1	1	3	1	0	0	0	0	0
Chicken-pox	547	683	568	595	445	525	489	556	162	240
Encephalitis Lethargica	7	4	5	3	1	2	1	1	1	1
Meningitis	0	0	0	0	0	0	0	0	0	0
Puerperal Pyrexia	0	0	6	9	9	9	15	3	7	7
Pemphigus Neonatorum	0	0	0	0	0	2	1	0	0	0
Total	1222	1520	1253	3816	1300	2630	2726	1212	2248	1988

ANALYSIS OF NOTIFICATIONS, 1933

Disease.	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec	Tot.
Smallpox	–	–	–	–	–	–	–	–	–	–	–	–	–
Scarlet Fever	3	9	7	2	13	14	17	11	27	64	45	28	240
Enteric Fever	–	–	–	–	–	–	–	–	–	–	–	–	–
Diphtheria	7	3	2	2	1	1	2	3	1	1	1	1	25
Puerperal Fever	–	–	–	–	1	–	–	1	–	–	–	–	2
Erysipelas	2	2	4	3	3	3	3	6	6	5	10	5	52
Ophthalmia Neon.	–	–		–	–	–	–	1	–	1	–	–	2
Phthisis	6	5	5	7	11	5	13	6	5	5	5	5	79
Other Tubercular Diseases	2	6	6	10	6	8	7	2	3	3	1	2	56
Pneumonia	39	32	20	24	22	10	14	13	11	26	24	18	253
Influenzal Pneumonia	24	20	1	–	2	1	1	–	1	–	–	–	50
Malaria	–	–	–	–	–	–	–	–	–	–	–	–	–
Chicken-pox	11	4	1	1	20	22	30	19	11	42	39	40	240
Encephalitis Lethargica	–	–	–	–	–	1	–	–	–	–	–	–	1
Measles	64	95	409	271	61	23	13	3	–	6	5	11	961
Puerperal Pyrexia		2	–	1	–		1	1	–	–	1	1	7
Acute Poliomyelitis	–	–	–	–	–	–	2	4	3	2	–	–	11
Cerebro Spinal Meningitis	–	2	–	–	1	–	2	2	–	–	–	2	9
Pemphigus Neonatorum	–	–	–	–	–	–	–	–	–	–	–	–	–
Dysentery	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	158	180	455	321	141	88	105	73	68	155	131	113	1988

INFECTIOUS DISEASES GENERALLY.

With the exception of measles, and pneumonia, the number of cases of notifiable diseases has been very low (see table on page 46). All these cases are visited and many persons suffering from pneumonia have been taken into hospital from homes where proper nursing was not possible and the results have been excellent.

The Medical Officer of Health is very frequently called in consultation by medical practitioners to cases of infectious disease. Between the Public Health Department and all the medical practitioners of the town there is a fine spirit of co-operation which is very helpful to all concerned.

MEASLES.

This disease has been locally notifiable since April 1st, 1925, and occurs in epidemic form frequently. Every case is visited either by Health Visitors or School Nurses, and from time to time special nurses have been appointed in epidemic periods for visiting and home nursing.

A large number of cases occurred in 1933, and there were 10 deaths.

Number of cases notified	961
Deaths	10

	1929.	1930.	1931.	1932.	1933.
Deaths from Measles ..	41	47	Nil.	22	10
Death-rate	·47	·54	Nil.	·26	·11
Schools Closed (Average period 18 days.)	Nil.	Nil.	Nil.	1	Nil.

CEREBRO SPINAL FEVER.

Nine cases were reported to be suffering from Cerebro-spinal Fever. These were treated at the Whelley Hospital. The diagnosis was revised in three instances; three cases died, and three recovered.

1. Female, age 6 years. Admitted 2nd Febraary. Died 3rd February.

This case was hopeless on admission, and died the following day.

2. Female, age 11 years. Admitted 13th February. Recovered 21st March.

This case had severe headache; head retraction and Kernig's sign. She made an uninterrupted recovery, and temperature fell to normal on 15th February.

3. Male, age 4 months. Admitted 15th May. Died 2nd June.

The baby had convulsions and frequent vomiting—only a very small amount of C.S.F. could be obtained. The baby was very tiny, and did not react to treatment.

4. Male, age 15 years. Admitted 17th July. Recovered 15th September.

This case was acutely ill on admission, with marked head retraction, frequent vomiting and severe headache, occasional diarrhœa and epistaxis frequently. Temperature kept at about 101° for first seven days in hospital and then fell to normal and remained so. The serum appeared to be very effective.

5. Male, age 21 years. Admitted 20th July. Died 21st July.

This case was moribund on admission to Whelley Hospital, and the C.S.F. thick and purulent. Serum was given at the Wigan Infirmary.

6. Male, age 1½ years. Admitted 12th December. Recovered 1st May, 1934.

Had marked retraction of head on admission, but the temperature was normal throughout. The serum seemed to act well, probably due to early admission. The long duration in hospital was due to the fact that throat swabs were positive for a considerable time. Excellent recovery.

ENTERIC FEVER.

Enteric fever still occurs in the Borough,bnt it has ceased to be the scourge it used to be in Wigan. The following table gives the figures since 1896.

	Cases.	*Deaths.*	*Death rate.*
Yearly average for 20 years ended 1915	96	18·5	·23
Yearly average for 5 years ended 1920	36	6·6	·07
Yearly average for 5 years ended 1925	18	2·4	·02
Yearly average for 5 years ended 1930	5	1	·01
Year 1930	1	Nil.	Nil.
Year 1931	1	Nil.	Nil.
Year 1932	5	1	·01
Year 1933	1	1	·01

INFLUENZA.

Influenza has been prevalent from time to time and information as to symptoms and type have been collected from medical practitioners and forwarded to the Ministry of Health. Articles have been published in the press during epidemics giving advice to the public as to necessary precautions. The mortality from influenza is shown in the following table :—

	1929.	1930.	1931.	1932.	1933.
Deaths	61	16	34	11	77
Death rate	·70	·18	·40	·13	·90
Schools closed (Average period 8 days.)	Nil.	Nil.	Nil.	Nil.	22

WHOOPING COUGH.

Information of cases of the disease is received from schools, during visits to homes of health visitors and school nurses, and occasionally from other sources. Each known case is visited, and if complicated or no nursing available, hospital treatment at Whelley is provided.

The number of deaths and the death rates for the last five years are given below :—

	1929.	1930.	1931.	1932.	1933.
Deaths	17	Nil.	1	2	1
Death rate	·19	Nil.	·01	·02	·01
Schools closed	Nil.	Nil.	Nil.	Nil.	Nil.

As in other diseases mentioned, many pamphlets have been distributed giving advice to parents, and articles have from time to time been written for the press.

VACCINATIONS.

The total number of vaccinations performed during 1933, by the two Public Vaccinators was 199.

SMALL POX.

No cases of small pox occurred in the Borough during 1933.

RETURN TO BE MADE ON OR BEFORE THE 9TH OF FEBRUARY, 1934, BY THE VACCINATION OFFICERS OF THE COUNTY BOROUGH OF WIGAN RESPECTING THE VACCINATION OF CHILDREN WHOSE BIRTHS WERE REGISTERED FROM 1ST JANUARY TO 31ST DECEMBER, 1933, INCLUSIVE.

Registration Sub-Districts comprised in the Vaccination Officer's District.	Number of Births returned in the "Births List Sheets" as registered from 1st January to 31st December, 1932.	Number of these Births duly entered by 31st January, 1934, in Columns I., II., IV., and V. of the "Vaccination Register" (Birth List Sheets), viz.:					Number of these Births which on 31st January, 1934, remained unentered in the "Vaccination Register" on account (as shown by "Report Book") of			Number of these Births remaining on 31st January, 1934, neither duly entered in the "Vaccination Register," (Columns 3, 4, 5, 6, and 7, of this Return), nor temporarily accounted for in the "Report Book" (columns 8, 9 and 10 of this Return).	* Total number of Certificates and copies of Certificates of Successful Primary Vaccination of Children under 14 received during the Calendar year 1933.	Number of Statutory Declarations of Conscientious Objection actually received by the Vaccination Officer irrespective of the dates of birth of the children to which they relate, during the Calendar year 1933.
		Col. I.	Col. II.		Col. IV.	Col. V.						
		Successfully Vaccinated.	Insusceptible of Vaccination.	Had Small-pox.	Number in respect of whom Statutory Declarations of Conscientious Objection have been received.	Died Unvaccinated.	Postponement by Medical Certificate.	Removal to Districts the Vaccination Officers of which have been apprised.	Removal to places unknown or which cannot be reached and cases not having been found.			
1	2	3	4	5	6	7	8	9	10	11	12	13
											These figures are to be obtained from columns 2 and 6 of the Summary (Form N)	
*WIGAN WEST ..	376	48	–	–	306	15	–	–	–	–	52	299
WIGAN EAST ..	580	137	1	–	347	51	7	4	13	20	145	352
WIGAN CENTRAL	563	102	2	–	400	43	4	–	12	–	67	380
TOTAL ..	1,519	287	3	–	1,053	109	11	4	25	20	262	1,031

9th February, 1934.

NOTE.—(*a*) The total of the figures in columns 3 to 11 should agree with the figure in column 2. Any cases of children successfully vaccinated after the declaration of conscientious objection had been made should be included in column 6, and not in column 3. The number of such cases should be inserted here:— Nil.

(*b*) The figures in columns 2 to 11 should not include re-registered births or cases of children born in other districts.

* The total in this column should be the number of certificates and copies of certificates of successful primary vaccination of children under 14, actually received during the year, *including* any relating to births registered in previous years. The total thus given should *include* the Certificates of successful primary vaccination of which copies have been sent to Vaccination Officers of other Districts. *The total number of copies of Certificates for the year 1933 sent to other Vaccination Officers should be stated here:*—5.

* 3 Removals 4 Refusals

CHICKEN POX.

Chicken Pox has ceased to be compulsorily notifiable in the Borough owing to the fact that Small Pox has not been prevalent in the surrounding districts. Cases coming to our knowledge through other channels were visited by a Medical Officer of the Department, in order to confirm the diagnosis, and was again visited later by a School Nurse (in cases of school age), and a re-admission certificate issued when the child was free from infection.

365 cases of Chicken Pox were reported. The inspecting and visiting of these cases entails a considerable amount of work.

21 reported cases were found to be suffering from various skin lesions and were not Chicken Pox.

SCARLET FEVER.

There is an increase in the number of cases, several have been of a severe type. There were 240 cases notified, 198 of which were admitted to hospital, and 3 deaths occurred.

The treatment of severe cases in hospital by antiscarletinal serum has been very successful.

DIPHTHERIA.

The number of cases notified was 25, or 7 less than in 1932, and there was one death. All cases are examined bacteriologically, and have two consecutive negative swabs before discharge from hospital. 25 cases were removed to hospital.

Anti-toxin can be obtained free of charge by practitioners at:—

The Pemberton Hospital. (Tel. Pemberton 14.)
The Pemberton Police Stations.
The Wigan Police Station.
Whelley Sanatorium (Telephone 3691)
Public Health Department (Telephone 2219).

SUMMER DIARRHOEA.

The following table gives particulars of deaths from Summer Diarrhœa. since the year 1883.

Average	for	the	ten	years	1883—1892 79·5
,,	,,	,,	,,		1893—1902 93·0
,,	,,	,,	,,		1903—1912 99·0
,,	,,	,,	,,		1913—1922 61·5
,,	,,	,,	,,		1923—1932 15·1

The number of deaths for the year 1933 was 15.

Enquiries have been made in each of these cases.

ENCEPHALITIS LETHARGICA.

One case was notified during the year; a male, aged 56 years.

ERYSIPELAS.

Number of cases notified	52
Number of deaths	1

PUERPERAL FEVER.

Number of cases notified	2
Number of deaths	1
Mortality per 1,000 of population	·01

*This case was not previously notified.

PUERPERAL PYREXIA.

Number of cases notified	7
*Number of deaths	—
Mortality	—

INFECTIOUS DISEASES (PREVENTION) ACTS, Etc.

A high-pressure disinfector is used for the purpose of the disinfection and disinfestation of clothing, bedding, and other articles.

No. of houses disinfected	502
,, rooms disinfected	884
,, beds disinfected	379
,, mattresses disinfected	169
,, sheets and quilts disinfected	1638
,, other articles disinfected	1423
,, premises cleansed and limewashed after infectious disease	69
,, visits to houses *re* limewashing and cleansing, &c.	84
,, ,, ,, infectious disease	221
,, letters sent out *re* infectious disease	30
,, ,, ,, limewashing	5
,, library books disinfected	164
,, schools disinfected	3

DISINFECTION.

All infected bedding and clothing is treated in a high-pressure steam disinfector on the Washington-Lyons principle, which is situated within the grounds of the Whelley Infectious Diseases Hospital. There is a cleansing station at the same hospital, quite apart from the wards, for the cleansing of verminous persons. It is fitted up with baths and dressing rooms, and the clothing is disinfected in the high pressure steam disinfector.

An efficient staff of four disinfectors deal with the disinfection of dwel ing houses. Rooms are disinfected as a routine after cases of all infectious diseases including tuberculosis, with the exception of measles and whooping cough.

Disinfection of rooms has been criticised, and in fact described as a useless procedure. Assuming that disinfection does not totally destroy the infecting organisms, it does impress the persons concerned of the necessity for cleanliness and care, and ensures a thorough scrubbing and cleansing of the rooms, which is doubtless of great hygienic value, especially in dirty houses.

There is no doubt that steam disinfection of bedding is a valuable preventive measure.

DISINFESTATION OF DWELLINGS.

During the year 57 houses which were found to be infested with vermin were fumigated on one or more occasions.

A supply of vermicide was provided along with the loan of suitable sprays for further treatment of these and other premises.

DISTRIBUTION OF DISINFECTANTS.

Disinfectants are provided free to the occupiers of houses where infectious disease has occurred, and in cases where there are exceptional circumstances. Other persons who desire supplies are charged a small amount to meet the cost of the disinfectant.

HEALTH EDUCATION.

Each month 2,000 copies of the journal " Better Health " are distribnted in the district.

Classes for mothers are held each week at the various Maternity and Child Welfare Centres.

Lectures on various health subjects are from time to time given in the town.

COMPENSATION CLAIMS AND MEDICAL EXAMINATIONS.

The Medical Officer of Health examined 139 Corporation employee-during the year 1933. The number of persons examined under the Works men's Compensation Acts is very high, owing to the establishment of a Works Department.

LABORATORY WORK.

The following specimens were submitted for examination during 1933 :—

	Positive.	*Negative.*	*Doubtful.*	*Not Examined.*	*Total.*
Swabs for Diphtheria	43	152	–	–	195
Widal tests for enteric	2	6	1	–	9
Fæces and urine for enteric	14	10	–	–	24
Cerebro spinal fluid	7	4	–	–	11
Naso-Pharyngeal Swabs	4	12	–	–	16
Wassermann Tests for V.D.	305	602	52	2	961
Tests for gonococci	1	11	–	–	12
Milk (T.B.)					97
Milk (bacteria count)					71
Milk for B. Coli					71
Water (bacteriological)					27
Water (chemical)					39
Ice Cream					4
Food and Drugs samples					237
Total examinations					1774

HOSPITAL FOR ACUTE INFECTIOUS CASES, WHELLEY.

76 Beds.

(44 beds based on Ministry's recommendation of 144 sq. ft. per bed).

STAFF IN 1933.

Matron.

3 Sisters.	1 Cook.
12 Probationers	4 Ward-maids.
1 Laundress.	1 Gardener.
1 House-maid	1 Assistant Gardener.
1 Waitress.	1 Boilerman.

The Medical Officer of Health personally attends the patients.

The Infectious Diseases Hospital is utilised to the best advantage, and by co-operation with the Maternity and Child Welfare Service, the School Medical Service, and the Medical Practitioners. Suitable cases of notifiable and non-notifiable diseases were admitted into the hospital.

Cases of infectious disease are admitted to Whelley Hospital from the surrounding districts, including: Aspull and Haigh, Ashton-in-Makerfield, Hindley, Ince, Orrell, Standish, Upholland, and the Wigan Rural area.

The incidence of Scarlet Fever in the Borough has not taxed the accommodation provided to anything like its fullest extent during the last ten years, and so it has been possible to admit cases of Measles with complications, or from unsuitable houses, Whooping Cough, Pneumonia, Cerebro Spinal Fever, Erysipelas, and Influenzal Pneumonia, and occasionally cases of debility and marasmus in infants.

Uncomplicated cases of Scarlet Fever are retained for about five weeks, and there have been two return cases.

On the whole the type of cases was more severe than in previous years.

	Notifications	Removed to Whelley Hospital.		Died in Whelley Hospital.	
		Wigan patients.	Out-dist. patients.	Wigan patients.	Out-dist. patients.
Smallpox	..	..	..	..	..
Scarlet Fever	240	198	24	3	..
Enteric Fever	..	1	3	1	2
Diphtheria and Memb. Croup ..	25	25	2	4	..
Pneumonia	253	22	..	5	..
Influenzal Pneumonia	50	2	..	..	..
Chicken-pox	240	..	..	..	..
Erysipelas	52	6	..	..	..
Ophthalmia Neonatorum ..	2	2	..	..	..
Pulmonary Tuberculosis ..	79	..	..	..	..
Other forms of Tuberculosis ..	56	..	..	..	..
Encephalitis Lethargica	1	1	..	..	..
Puerperal Fever	2	..	..	..	..
Measles	961	17	..	3	..
Acute Poliomyelitis	11	4	2	..	..
Puerperal Pyrexia	7	..	..	..	..
Cerebro Spinal Meningitis ..	9	9	5	5	1
Pemphigus Neonatorum	..	..	..	..	..
Dysentery	..	..	..	..	..
Others	..	4	..	1	..
Totals	1988	291	36	22	3

Whelley Hospital.	Diphtheria.	Scarlet.	Enteric.	Others.	Total.
In-patients, Jan. 1, 1933 ..	5	10	6	8	29
Admitted in 1933	27	222	4	74	327
Discharged „	27	196	6	63	292
Died „	4	3	3	15	25
In-patients, Jan. 1, 1934 ..	1	33	1	4	39

REVISIONS OF DIAGNOSES OF CASES TREATED AT WHELLEY SANATORIUM.

Admitted as suffering from :	*Revised diagnosis :*
Scarlet Fever	Broncho Pneumonia and Scarlet Fever.
Scarlet Fever	Erythema.
Scarlet Fever	Septicæmia.
Scarlet Fever	Tonsilitis.
Scarlet Fever	Erythema.
Scarlet Fever	Erythema.
Scarlet Fever	Whooping Cough.
Scarlet Fever	Scarlet Fever and Chicken Pox.
Scarlet Fever	Scarlet Fever and Chicken Pox.
Scarlet Fever	Scarlet Fever and Chicken Pox.
Scarlet Fever	Scarlet Fever and Diphtheria.
Scarlet Fever	Tonsilitis.
Scarlet Fever	Erythema.
Scarlet Fever	Erythema.
Scarlet Fever	Tonsilitis.
Scarlet Fever	Erythema.
Scarlet Fever	Bronchitis.
Scarlet Fever	Acute Bronchitis and Asthma.
Scarlet Fever	Septic Tonsilitis.
Scarlet Fever	Erythema.
Pneumonia	Bronchitis.
Pneumonia	Empyæma.
Pneumonia	Acute Intestinal Obstruction.
Pneumonia and Measles ..	Whooping Cough and Measles.
Influenzal Pneumonia	Empyæma.
Typhoid	Military Tuberculosis.
Typhoid	Pneumonia.
Diphtheria	Syphilis.
Diphtheria	Nephritis.
Diphtheria	Acute Nephritis.
Laryngeal Diphtheria	Septic Throat and Otitis.
Cerebro Spinal Fever	Bronchial Pneumonia.
Cerebro Spinal Fever	Facial Paralysis.
Cerebro Spinal Fever	Sub-acute Rheumatism.
Cerebro Spinal Meningitis ..	Pneumo Cocci Meningitis.
Measles	Otitis and Mastoid Abscess.
Encaphalitis	Cerebro Spinal Fever.
Poliomyelitis	Dislocation of Left Hip.

8.—OTHER DISEASES.

BRONCHITIS.

	1929.	1930.	1931.	1932.	1933.
Deaths	171	107	130	81	128
Rates	1·95	1·22	1·51	·95	1·50

PNEUMONIA.

	1929.	1930.	1931.	1932.	1933.
Deaths	169	108	121	125	141
Rates	1·93	1·23	1·40	1·46	1·65

OTHER DISEASES OF RESPIRATORY ORGANS.

	1929.	1930.	1931.	1932.	1933.
Deaths	7	12	14	16	11
Rates	·08	·14	·16	·19	·13

TOTAL OF THESE THREE RESPIRATORY DISEASES.

	1929.	1930.	1931.	1932.	1933.
Deaths	347	227	265	222	280
Rates	3·96	2·59	3·07	2·60	3·28

CANCER.

	1929.	1930.	1931.	1932.	1933.
Deaths	77	95	105	107	102
Rates	·87	1·09	1·22	1·25	1·19

DEATHS FROM CANCER.

FIGURES FOR LAST 20 YEARS.

Year.	No. of Deaths.		Year.	No. of Deaths.	
1914	60		1924	69	
1915	48		1925	99	
1916	60	280	1926	81	406
1917	55		1927	76	
1918	57		1928	81	
1919	53		1929	77	
1920	83		1930	95	
1921	56	315	1931	105	566
1922	59		1932	107	
1923	64		1933	102	

SCHEME FOR RADIUM TREATMENT OF CANCER CASES.

Following recommendations of the Ministry of Health (Circular 1276) the Corporation of Wigan have made arrangements with the Wigan Infirmary and the Manchester and District Radium Institute for the treatment of suitable cases of cancer by radium. The Wigan Infirmary for this purpose is a sub-clinic of the Manchester Centre. The Director of the Manchester and District Radium Institute will be responsible for radium treatment at the Wigan Infirmary, and he will visit the Wigan Infirmary on the third Thursday each month.

This scheme applies only to cases resident in the County Borough of Wigan.

All recommendations for radium treatment of cancer by Medical Practitioners in suitable cases must be made in writing to the Medical Officer of Health. These will be communicated to the Wigan Infirmary, and arrangements for examination and treatment if suitable will be made by that institution.

9—TUBERCULOSIS.

ARTIFICIAL PNEUMOTHORAX.

During the year this has been attempted in 9 cases and in all 85 re-fills have been done.

This treatment has been continued at Pemberton after the patients have left the institution, attendances varying between two and three weeks between re-fills.

In addition the treatment is continued at Pemberton even although it may have been started at an institution outside the Borough.

THE STAFF AT PEMBERTON HOSPITAL.

The Chief Tuberculosis Officer is Medical Superintendent.

The Clinical Tuberculosis Officer is Medical Officer.

Matron of Infectious Diseases Hospital is also Matron of Pemberton Hospital.

A Sister-in-charge.

Two Probationer Nurses.

Two Night Nurses.

Domestic Staff: Cook, Kitchen Maid, House Maid, Ward Maid Gardener and Porter.

EFFECTS OF OCCUPATION ON INCIDENCE OF TUBERCULOSIS

The following figures show the incidence of tuberculosis amongst the workers in the principal occupations in Wigan during the five years 1929-33.

Occupation.	*Incidence rate per* 1,000 *employed (According to Registrar-General's* 1921 *census) during the five years* 1929-1933.
Cotton Operatives	10·78
Tailors and Tailoresses	21·26
Clerks	13·60
Colliers	8·23
Shop Assistants	13·98
Railwaymen and Locomotive Drivers	7·33
Teachers	2·0

When comparing these figures it must be remembered that a collier's life is an arduous one, and that consequently only the robust in a family are chosen for this occupation. Coal dust is not particularly harmful to lung tissue, in fact some authorities claim that it has a slight antiseptic action.

PROPAGANDA.

The dangers of spitting have been forcibly pointed out from time to time, but despite all our efforts against it, careless spitting in Wigan continues to exist to a dangerous and disgusting degree. Our footpaths are in places often fouled with sputum. This filthy habit is not confined to the streets, it exists in homes also. It is the cause of much consumption. Apologists explain that workers in coal-dust more easily contract the habit, but no real excuse can be found. Public opinion must be moulded to oust this offensive and dangerous practice.

AFTER-CARE.

There is in Wigan an After-Care Committee. The objects of this Committee are briefly:—

(1) To provide extra nourishment, mainly in the form of milk.

(2) To help in providing extra clothing needed by patients when they go to a sanatorium; also to provide clothing for necessitous tuberculous cases at home.

(3) To loan bedsteads, bedding, etc., where, in the opinion of the officers of the Committee, this is desirable, either for the greater comforts of the patients, or for their better isolation.

(4) In exceptional cases, to assist dependants.

(5) To help in securing suitable work for those sufficiently recovered to undertake it.

(6) Visiting and friendly advice.

(7) Any other help required by tuberculous persons.

(8) To assist in educating public opinion in matters of health especially in regard to tuberculosis.

The Clinical Tuberculosis Officer acts as an honorary Medical Officer to this Committee, which provides extra nourishment in the form of milk and eggs, etc., on his recommendation.

During the year 1933, 140 received milk, average weekly 107, 24 persons were assisted with new clothing provided by the Committee, and 12 persons were assisted with clothing received from various members of the Committee. Beds and bedding were provided in four cases.

Two Overcoats and twelve children's Coats were received from Mr. Gaunt. One Bed and Stocks was given by Mrs. Watts. Two large parcels of new Underclothing were received from Mrs. Bates. A child's Cot was given by Mrs. Tickle, per Mr. Martlew, and is now out on loan.

The Dispensary makes an annual grant of £100, and the Public Assistance Committee subscribes £30 annually. An important part of the work of an After-care Committee is to help in securing suitable work for those sufficiently recovered to undertake it. The local employers have frequently found light work for tuberculous persons but of late years the light work has been done by those in receipt of compensation under the Workmen's Compensation Act.

The members of the After-care Committee visit the homes of the patients and assist in educating public opinion in matters of health.

90 Disinfections of the homes of tuberculous persons were carried out during the year

NEW CASES AND MORTALITY DURING 1933.

Age Periods.	*New Cases.*				*Deaths.*			
	Pulmonary.		*Non-Pulmonary.*		*Pulmonary.*		*Non-Pulmonary.*	
	M.	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
0–	1	–	2	1	–	–	1	–
1–	1	1	12	1	1	–	3	2
5–	4	2	4	2	–	–	1	–
10–	2	3	4	4	1	1	–	–
15–	5	6	6	4	5	6	1	–
20–	9	5	3	3	4	5	2	1
25–	7	8	–	2	5	12	1	1
35–	6	7	1	1	7	4	1	–
45–	8	2	1	–	6	3	–	–
55–	3	1	2	–	3	1	–	1
65 and upwards	–	–	–	–	1	–	–	–
Total ..	46	35	35	18	33	32	10	5

The number of deaths from Pulmonary Tuberculosis was 65, against 66 in 1932, and 62 in 1931. The number of deaths from other tubercular affections is 15, against 17 in 1932 and 18 in 1931.

The rates are as follows :—

Pulmonary Tuberculosis ·77 per 1,000 of population.

Other Tuberculous Diseases .. ·17 ,, ,,

If taken together as tuberculous affections, we have 80 deaths, or a rate of ·94 per 1,000 of the population.

The deaths occurred in the following Wards :—

Wards	Pulmonary Tuberculosis.	Other Tubercular. Diseases.	Total.
No. 1—St. George	3	–	3
No. 2—Lindsay	3	1	4
No. 3—St. Catharine	7	2	9
No. 4—St. Patrick	11	3	14
No. 5—St. Thomas	3	2	5
No. 6—Poolstock	5	–	5
No. 7—Victoria	4	2	6
No. 8—St. Andrew	13	3	16
No. 9—Swinley	7	–	7
No. 10—All Saints	1	–	1
No. 11—West Pemberton	2	–	2
No. 12—North Pemberton	2	–	2
No. 13—Central Pemberton	1	1	2
No. 14—South Pemberton	3	1	4
Totals	65	15	80

TUBERCULOSIS.

Cases Notified.

	1929.	1930.	1931.	1932.	1933.
Pulmonary	115	91	102	83	81
Other forms of Tuberculosis	38	52	62	43	53
Total	153	143	164	126	134

Deaths.

	1929.	1930.	1931.	1932.	1933.
Phthisis	72	76	62	66	65
Other forms of Tuberculosis	14	16	18	17	15
Total	86	92	80	83	80

Death Rates.

	1929.	1930.	1931.	1932.	1933.
Phthisis	·82	·87	·72	·77	·77
Other forms of Tuberculosis	·16	·18	·21	·20	·17
Total	·98	1·05	·93	·97	·94

	Total Cases Notified	Total Deaths
Pulmonary :—Males	46	33
Females	35	32
Total	81	65
Non-Pulmonary :—Males	35	10
Females	18	5
Total	53	15

Fatal Cases of Tuberculosis :—	
Notified Cases	70
Non-notified	10
Total deaths	80

The ratio of non-notified deaths from Tuberculosis to notified deaths is as 10 is to 70, or 12·5% of the total.

COUNTY BOROUGH OF WIGAN.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1930.

SUMMARY OF NOTIFICATIONS DURING THE PERIOD FROM THE 1ST JANUARY, 1933, TO THE 31ST DECEMBER, 1933

Formal Notifications.

Age periods.	Number of Primary Notifications of new cases of tuberculosis.											Total (all ages).	Total Notifications
	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—		
Pulmonary Males	1	1	4	2	5	9	7	6	8	3	–	46	46
Pulmonary Females ..	–	1	2	3	6	5	8	7	2	1	–	35	35
Non-pulmonary Males ..	2	12	4	4	6	3	–	1	1	2	–	35	39
Non-pulmonary Females ..	1	1	2	4	4	3	2	1	–	–	–	18	18

SUPPLEMENTAL RETURN.

NEW CASES OF TUBERCULOSIS COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH DURING THE ABOVE-MENTIONED PERIOD, OTHERWISE THAN BY FORMAL NOTIFICATION.

Age Periods.	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	Total.
Pulmonary Males	–	–	–	–	1	3	–	2	4	–	1	11
Pulmonary Females ..	–	–	–	1	–	1	–	1	1	–	–	4
Non-Pulmonary Males ..	–	1	–	–	–	1	–	–	–	–	–	2
Non-Pulmonary Females ..	–	1	–	–	–	1	2	–	–	1	–	5

THE SOURCE OR SOURCES FROM WHICH INFORMATION AS TO THE ABOVE-MENTIONED CASES WAS OBTAINED SHOULD BE STATED BELOW :—

Source of Information.	No. of Cases.	
	Pulmonary	Non-Pulmonary
Death Returns —from local Registrars	2	2
—transferable deaths from Registrar General	5	1
Posthumous Notifications	–	1
" Transfers " from other areas (other than transferable deaths)	8	3
Other Sources if any (specify)	–	–

CASES OF TUBERCULOSIS (ALL FORMS) NOTIFIED IN 1933

Wards.	Population, Census 1931	Pulmonary Tuberculosis	Other forms of Tuber'losis.	Totals
No. 1—St. George	4281	5	3	8
No. 2—Lindsay	5222	4	3	7
No. 3—St. Catharine ..	6929	6	6	12
No. 4—St. Patrick ..	8571	11	8	19
No. 5—St. Thomas ..	4182	4	3	7
No. 6—Poolstock	4774	6	2	8
No. 7—Victoria	4747	9	8	17
No. 8—St. Andrew ..	14083	10	14	24
No. 9—Swinley	7880	5	2	7
No. 10—All Saints	2756	3	–	3
No. 11—West Pemberton ..	3740	4	1	5
No. 12—North „ ..	6605	4	2	6
No. 13—Central „ .	6129	2	3	5
No. 14—South „ ..	5458	5	1	6
Totals	85,357	78	56	134

RESULTS OF SUNLIGHT TREATMENT, 1933.

TUBERCULOSIS DISPENSARY.

Disease	Under Treatment 1st Jan., 1933	New Cases	Discharged			Ceased to Attend	Under Treatment 31st Dec. 1933
			Much Improved	Improved	Stationary		
T.B. Glands ..	7	16	12	1	1	2	7
Lupus	3	2	1	–	1	–	3
Bones and Joints	–	1	–	–	–	–	1
T.B. Abdomen ..	–	–	–	–	–	–	–
Totals ..	10	19	13	1	2	2	11

COUNTY BOROUGH OF WIGAN.

RETURN SHOWING THE WORK OF THE DISPENSARY
DURING THE YEAR 1933.

Diagnosis.	Pulmonary.				Non-Pulmonary.				Total.				Grand Total.
	Adults.		Children.		Adults.		Children.		Adults.		Children.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
A.—New Cases examined during the year (excluding contacts) :—													
(*a*) Definitely tuberculous..	31	29	6	5	9	7	15	9	40	36	21	14	111
(*b*) Diagnosis not completed ..	–	–	–	–	–	–	–	–	3	–	1	–	4
(*c*) Non-tuberculous	–	–	–	–	–	–	–	–	32	26	16	15	89
B.—Contacts examined during the year :—													
(*a*) Definitely tuberculous..	1	–	1	1	–	–	–	–	1	–	1	1	3
(*b*) Diagnosis not completed ..	–	–	–	–	–	–	–	–	–	–	–	–	–
(*c*) Non-tuberculous	–	–	–	–	–	–	–	–	5	7	14	16	42
C.—Cases written off the Dispensary Register as													
(*a*) Recovered ..	1	1	–	–	–	2	6	5	1	3	6	5	15
(*b*) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous ..	–	–	–	–	–	–	–	–	38	35	31	32	136
D.—No. of Persons on Dispensary Register on Dec. 31st :—													
(*a*) Definitely tuberculous ..	172	124	20	26	62	61	68	52	234	185	88	78	585
(*b*) Diagnosis not completed.	–	–	–	–	–	–	–	–	3	–	1	–	4

1. Number of cases on Dispensary Register on January 1st 617

2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years 4

3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" 60

4. Cases written off during the year as Dead (all causes).. 70

5. Number of attendances at the Dispensary (including Contacts) 3,572

6. Number of Insured Persons under Domiciliary Treatment on the 31st December 61

7. Number of consultations with medical practitioners:
 (a) Personal 42
 (b) Others 253

8. Number of visits by Tuberculosis Officers to homes (including personal consultations) 89

9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes 1,799

10. Number of
 (a) Specimens of sputum, etc., examined 443
 (b) X-ray Examinations made in connection with Dispensary work 326

11. Number of "Recovered" cases restored to Dispensary Register, and included in A (a), and A (b) above. None.

12. Number of "T.B. plus" cases on Dispensary Register on December 31st 136

County Borough of Wigan.

RESIDENTIAL INSTITUTIONS.

(A) Return showing the Extent of Residential Treatment and Observation during the year 1933 in Institutions (other than Poor Law Institutions) approved for the Treatment of Tuberculosis.

	In Institutions on Jan 1.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31
No. of Doubtfully Tuberculous Cases admitted for Observation :					
Adults : M.	..	3	3	..	..
F.	..	2	2	..	..
Children	..	–	–	..	..
No. of Definitely Tuberculous Patients admitted for Treatment :					
Adults : M.	33	46	37	11	31
F.	24	43	39	7	21
Children	8	16	14	1	9
Total ..	65	110	95	19	61

(B) Return showing the Extent of Residential Treatment provided during the Year 1933 in Poor Law Institutions for Persons Chargeable to the Council.

	In Institutions on Jan. 1.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31.
No. of Patients suffering from Pulmonary Tuberculosis admitted for Treatment :					
Adults : M.	5	15	10	5	5
F.	3	11	9	5	–
Children	–	5	2	1	2
No. of Patients suffering from Non-pulmonary Tuberculosis admitted for Treatment :					
Adults : M.	1	3	1	2	1
F.	1	1	1	1	–
Children	2	6	8	–	–
Total ..	12	41	31	14	8

County Borough of Wigan.

Return showing the immediate Results of Treatment of Definitely Tuberculous Patients Discharged during the Year 1933, from Institutions Approved for the Treatment of Tuberculosis.

	Classification on admission to the Institution.	Condition at time of discharge.	Duration of Residential Treatment in the Institution.												TOTALS.			Grand Totals.
			Under 3 months.			3—6 months.			6—12 months.			More than 12 mths.						
			M	F	Ch.	M	F	Ch	M	F	Ch.	M	F	Ch.	M.	F.	Ch.	
Pulmonary Tuberculosis.	T.B. minus.	Quiescent	1	1	2	–	–	–	1	–	–	–	–	–	2	1	2	5
		Not Quiescent ..	4	1	3	2	1	2	1	1	–	1	–	–	8	3	5	16
		Died in Institution	1	2	1	–	–	–	–	–	–	–	–	–	1	2	1	4
	T.B. plus Group 1	Quiescent	–	–	–	1	–	–	–	–	–	–	–	–	1	–	–	1
		Not Quiescent ..	2	–	–	1	1	–	–	–	–	–	–	–	3	1	–	4
		Died in Institution	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	T.B. plus Group 2	Quiescent	–	–	–	–	–	–	–	1	–	–	1	–	–	2	–	2
		Not Quiescent ..	4	6	–	3	4	1	3	7	–	1	3	–	11	20	1	32
		Died in Institution	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	T.B. plus Group 3	Quiescent	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Not Quiescent ..	–	2	1	–	1	–	–	1	–	–	–	–	–	4	1	5
		Died in Institution	3	2	–	3	3	–	–	–	–	3	–	–	9	5	–	14
Non-Pulmonary Tuberculosis.	Bones & Joints.	Quiescent	2	1	–	2	–	–	2	1	1	–	–	2	6	2	3	11
		Not Quiescent ..	2	3	1	–	–	–	1	–	–	–	–	–	3	3	1	7
		Died in Institution	–	–	–	–	–	–	1	–	–	–	–	–	1	–	–	1
	Abdominal.	Quiescent.. ..	–	–	–	–	1	–	–	–	–	–	–	–	–	1	–	1
		Not Quiescent ..	1	2	1	–	–	–	–	–	–	–	–	–	1	2	1	4
		Died in Institution	–	–	1	–	–	–	–	–	–	–	–	–	–	–	1	1
	Other Organs	Quiescent	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Not Quiescent ..	2	–	–	–	–	–	–	–	–	–	–	–	2	–	–	2
		Died in Institution	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	Peripheral Glands	Quiescent	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Not Quiescent ..	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Died in Institution	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Return showing the Results of Observation of Doubtfully Tuberculous Cases Discharged during the Year 1933, from Institutions Approved for the Treatment of Tuberculosis.

Diagnosis on Discharge from Observation.	For Pulmonary Tuberculosis.						For Non-Pulmonary Tuberculosis.						Totals.		
	Stay under 4 weeks.			Stay over 4 weeks.			Stay under 4 weeks.			Stay over 4 weeks.					
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.			
Tuberculous ..	1	–	–	–	1	–	–	–	–	–	–	–	1	1	–
Non-Tuberculous	–	–	–	2	1	–	–	–	–	–	–	–	2	1	–
Doubtfnl	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Totals	1	–	–	2	2	–	–	–	–	–	–	–	3	2	–

COUNTY BOROUGH OF WIGAN.

(*a*) PULMONARY TUBERCULOSIS.

ANNUAL RETURN showing in summary form the condition of all Patients whose case records are in the possession of the Dispensary at the end of 1933, arranged according to the years in which the patients first came under Public Medical Treatment for Pulmonary Tuberculosis, and their classification as shown on Form A.

Condition at the time of the last record made during the year to which the return relates.			Previous to 1926.					1926.					1927.					1928.					1929.					1930.					1931.					1932.					1933.				
			Class T.B. minus.	Class T.B. plus.				Class T.B. minus.	Class T.B. plus.				Class T.B. minus.	Class T.B. plus.				Class T.B. minus.	Class T.B. plus.				Class T.B. minus.	Class T.B. plus.				Class T.B. minus.	Class T.B. plus.				Class T.B. minus.	Class T.B. plus.				Class T.B. minus.	Class T.B. plus.				Class T.B. minus.	Class T.B. plus.			
				Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).		Group 1.	Group 2.	Group 3.	Total Class T.B. (plus).		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).
(a) Remaining on Dispensary Register on 31st December.	Disease arrested ..	Adults M. ..	23	14	6	–	20	4	–	–	–	–	7	–	1	–	1	11	–	–	–	–	10	–	2	–	2	5	3	–	–	3	2	–	–	–	–	–	–	–	–	–	–	–	–		
		F. ..	13	–	2	–	2	1	–	–	–	–	4	–	–	–	–	5	–	–	–	–	6	–	–	–	–	2	1	–	–	3	2	2	–	–	2	–	–	–	–	–	–	–	–		
		Children ..	6	–	–	–	–	2	–	–	–	–	6	1	1	–	2	13	–	–	–	–	7	–	–	–	–	3	–	–	–	–	5	–	–	–	–	–	–	–	–	–	–	–	–	–	
	Disease not Arrested	Adults M. ..	9	3	3	–	6	3	1	–	–	1	–	–	1	–	1	–	–	1	–	1	2	–	3	–	3	2	–	2	–	2	–	–	1	–	1	5	6	2	–	8	5	8	13	2	23
		F. ..	3	–	8	–	8	–	–	3	–	3	1	–	1	–	1	1	–	1	–	1	1	–	3	–	3	1	1	2	–	3	1	1	5	3	9	5	1	6	–	7	2	5	10	–	15
		Children ..	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	–	–	–	–	1	–	–	–	–	6	–	1	–	1	8	1	–	–	1	6	–	–	1	1
	Condition not ascertained during the year		2	1	1	–	2	1	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
	Total on Dispensary Register at 31st Dec...		56	18	20	–	38	12	1	3	–	4	18	1	4	–	5	31	–	2	–	2	28	–	8	–	8	14	5	6	–	11	16	3	7	3	13	18	8	8	–	16	13	13	23	3	29
(b) Not now on Dispensary Register, and reasons for removal therefrom.	Discharged as Recovered	Adults M. ..	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
		F. ..	12	–	1	–	1	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Children	17	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	Lost sight of, or otherwise removed from Dispensary Register		37	14	14	–	28	20	4	3	–	7	14	2	3	2	7	19	–	2	–	2	8	3	2	–	5	8	–	2	–	2	4	2	3	–	5	1	1	2	1	4	1	–	–	–	–
	Dead	Adults M. ..	25	3	11	29	43	11	–	4	17	21	12	–	5	11	16	11	–	1	25	26	3	1	5	15	21	4	–	6	7	13	4	3	2	10	15	3	1	2	8	11	2	–	1	2	3
		F. ..	19	1	9	19	29	16	1	3	19	23	7	1	3	18	22	10	–	5	27	32	7	1	3	18	22	3	1	8	13	22	4	–	11	13	24	4	–	6	7	13	3	–	1	9	10
		Children	4	1	2	1	4	3	–	–		–	3	–	–	3	3	3	–	1	5	6	–	1	–	–	1	2	–	–	1	1	1	–	–	1	1	2	–	1	–	1	3	–	–	2	2
	Total written off Dispensary Register		116	19	37	49	105	52	5	10	36	51	36	3	11	34	48	45	–	9	57	66	18	6	10	33	49	17	1	16	21	38	13	5	16	24	45	10	2	11	16	29	9	–	2	13	15
GRAND TOTALS			172	37	57	49	143	64	6	13	36	55	54	4	15	34	53	76	–	11	57	68	46	6	18	33	57	31	6	22	21	49	29	8	23	27	58	28	10	19	16	45	22	13	25	16	54

COUNTY BOROUGH OF WIGAN.

(*b*) NON-PULMONARY TUBERCULOSIS.

ANNUAL RETURN showing in summary form the condition of all Patients whose case records are in the possession of the Dispensary at the end of 1933, arranged according to the years in which the Patients first came under the Public Medical Treatment, and their classification as shown on Form A.

Condition at the time of the last record made during the year to which the return relates.		Previous to 1926.					1926.					1927.					1928.					1929.					1930.					1931.					1932.					1933.				
		Bones and Joints	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total	Bones and Joints.	Abdominal	Other Organs.	Peripheral Glands.	Total.
(a) Remaining on Dispensary Register on 31st Dec.																																														
Disease arrested	Adults M. ..	1	1	2	–	4	–	–	–	–	–	1	–	1	–	2	–	–	–	1	1	–	–	1	–	1	2	1	1	–	4	2	2	–	1	5	3	–	–	2	5	3	–	1	3	7
	Adults F. ..	2	1	1	1	5	1	–	–	–	1	2	–	–	1	3	1	–	1	2	4	1	–	–	–	1	–	–	3	2	5	1	–	–	6	7	2	–	–	1	3	–	2	–	–	2
	Children ..	9	3	3	11	26	1	–	–	7	8	5	3	2	7	17	3	2	1	8	14	4	3	–	6	13	3	6	1	8	18	3	5	2	11	21	–	–	1	11	12	2	1	–	10	13
Disease not Arrested	Adults M. ..	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	1	–	–	–	1	–	–	–	–	–	1	–	–	–	1	1	–	1	–	2	1	–	–	1	2	1	–	1	1	3
	Adults F. ..	1	–	1	–	2	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	–	–	–	3
	Children ..	–	–	–	–	–	–	1	–	–	1	–	1	–	–	1	1	–	–	–	1	2	–	–	1	3	1	–	–	–	1	3	–	–	1	4	2	1	–	1	4	3	3	–	3	9
Condition not ascertained during the year		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Total on Dispensary Register at 31st December ..		13	5	8	12	38	2	1	–	7	10	8	4	4	8	24	6	2	2	12	22	7	3	1	7	18	7	7	5	10	29	10	7	3	19	39	8	1	1	16	26	12	6	2	17	37
Transferred to Pulmonary..		–	1	2	4	7	1	–	1	–	2	–	–	1	–	1	–	1	–	2	3	–	–	–	–	–	–	–	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
(b) Not now on Dispensary Register, and reasons for removal therefrom.																																														
Discharged as Recovered	Adults M. ..	10	–	2	–	12	–	–	–	–	–	–	–	–	–	–	1	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	Adults F. ..	2	–	–	6	8	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	Children ..	9	3	1	6	19	1	1	–	1	3	–	3	–	–	3	1	–	1	6	8	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Lost sight of, or otherwise removed from Dispensary Register		28	9	7	34	78	2	6	7	18	33	1	1	5	11	18	1	2	3	3	11	–	–	–	3	3	1	2	–	5	8	3	–	–	4	7	3	–	1	1	5	1	–	–	1	2
Dead ..	Adults M. ..	4	1	2	–	7	4	1	–	–	5	3	–	–	–	3	1	–	2	–	3	–	–	–	1	1	1	–	–	1	2	–	–	1	–	1	1	–	–	–	1	–	–	–	–	–
	Adults F. ..	–	–	–	–	–	1	3	–	–	4	1	–	2	–	3	2	–	1	1	4	–	1	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	Children ..	1	2	2	1	6	2	2	4	–	8	1	–	7	–	8	1	1	–	–	2	3	3	1	–	7	–	2	1		3	2	–	1	–	3	–	1	–	–	1	1	2	–	–	3
Total written off Dispensary Register		54	15	14	47	130	10	13	11	20	54	6	4	14	11	35	7	3	7	12	29	3	4	1	4	12	2	4	1	8	15	5	–	2	4	11	4	1	1	1	7	2	2	–	1	4
Grand Totals of (a) and (b) (excluding those transferred to Pulmonary) ..		67	20	22	59	168	12	14	11	27	64	14	8	18	19	59	13	5	9	24	51	10	7	2	11	30	9	11	6	18	44	15	7	5	23	50	12	2	2	17	33	14	8	2	18	42

NOTIFIED CASES ON REGISTER AT 31st DECEMBER, 1933.

WARD	Pulmonary					Non-Pulmonary					Grand Total
	Adults		Children under 16.			Adults		Children under 16.			
	M.	F.	M.	F.	Total	M.	F.	M.	F.	Total	
St. George's ..	10	12	–	–	22	3	1	5	3	12	34
Lindsay ..	8	4	–	–	12	5	3	3	2	13	25
St. Catharine ..	16	12	2	3	33	7	4	6	8	25	58
St. Patrick ..	29	15	4	3	51	9	9	6	5	29	80
St. Thomas ..	10	9	2	2	23	3	3	3	1	10	33
Poolstock ..	12	7	2	1	22	5	6	2	–	13	35
Victoria ..	28	20	1	6	55	12	11	15	11	49	104
St. Andrew ..	10	7	2	1	20	4	5	5	3	17	37
Swinley ..	12	9	–	4	25	–	–	3	4	7	32
All Saints ..	8	2	–	2	12	4	2	1	–	7	19
Pemberton W.	7	6	1	2	16	2	4	4	3	13	29
Pemberton N.	15	11	2	–	28	3	5	1	4	13	41
Pemberton C.	6	6	1	1	14	2	5	6	5	18	32
Pemberton S.	1	4	3	1	9	3	3	8	3	17	26
Totals ..	172	124	20	30	342	62	61	68	52	243	585

PUBLIC HEALTH (Prevention of Tuberculosis) REGULATIONS, 1925.

During the year 1933 there was no necessity to take action under these Regulations.

PUBLIC HEALTH ACT, 1925, Section 62.

There was no necessity to take action during the year under Section 62, Public Health Act, 1925.

10.—VENEREAL DISEASES.

The figures below show the work done in 1933:—

	Borough.			*County.*			*Others.*	
	1932.	1933.		1932.	1933.		1932.	1933.
(*a*) Number of persons from each area dealt with during the year at or in connection with the Out-Patient Clinic *for the first time* and found to be suffering from:—								
Syphilis	38	29	..	30	22	..	1	2
Soft Chancre	–	1	..	1	–	..	–	–
Gonorrhœa	54	62	..	64	60	..	3	6
Conditions other than Venereal	53	59	..	47	63	..	1	2
Total	145	151	..	142	145	..	5	10
(*b*) Total number of attendances of all patients residing in each area ..	4793	5681	..	5856	5372	..	28	102
(*c*) Aggregate number of "In-patient days" of all patients residing n each area	51	98	..	54	49	..	–	–
(*d*) Number of doses of arseno-benzol compounds given to patients residing in each area	565	743	..	502	476	..	3	3

FIGURES FOR THE PAST FIVE YEARS.

	1929.	1930.	1931.	1932.	1933.
New cases	277	288	258	292	306
Total Attendances at V.D. Clinic ..	10138	10126	9580	10677	11155
In-patient days	173	304	218	105	147

11.—MATERNITY AND CHILD WELFARE.

During the last ten years great progress has been made in this important section of the Public Health Department. At the beginning of this period the Central Clinic was conducted at premises in Rodney Street which were quite inadequate for the purpose. The only other centre was at Billinge Road, Pemberton, and this was only partially developed.

Since that time three more clinics (Platt Lane, Worsley Mesnes, and St. Andrew's, Woodhouse Lane) have been organised, the Central Clinic moved to premises in the Municipal Buildings, and Pemberton Clinic made suitable and modern by many alterations.

	1929.	1930.	1931.	1932.	1933.
ATTENDANCES AT CLINICS :—					
Babies	10012	10011	10603	10111	11755
Primary Visits of Babies ..	1193	1060	1078	1067	1262
Expectant Mothers	467	401	456	745	730
MATERNAL MORTALITY :—					
Deaths	13	12	7	13	9
Rate	8·45	7·59	4·38	8·54	6·37
Births	1538	1579	1598	1522	1415
VISITS PAID TO EXPECTANT MOTHERS :					
By Health Visitors	284	346	469	499	489

DENTAL TREATMENT.

The following table shows the dental work carried out during the year 1933, in connection with the Maternity and Child Welfare Department.

Babies Treated.	Dressing, &c.	Extractions.	Fillings.	Mothers Treated.	Extractions.	Fillings.	Scalings &c.	Dentures.
71	34	44	14	77	87	7	25	1

CHILDREN'S ACT.

On the 1st January there were seven nursed out children on the register. On the 31st December there were seven on the register. The Health Visitors who are also Infant Life Protection Visitors paid 41 visits to premises where children were being nursed out. There were no complaints.

ANTE-NATAL SCHEME.

A scheme dealing with ante-natal examination and care followed by whatever treatment is necessary came into operation in May, 1932.

A consultant Obstetrician (Dr. C. P. Brentnall), who is on the staff of St. Mary's Hospital, Manchester, attends the clinic, Library Street, on the second Friday in each month at 2 o'lcock in order to see and examine special ante-natal cases.

Medical Practitioners are asked to send along cases where abnormal conditions are present, or where they would like another opinion. Practitioners are cordially invited to attend with their patients.

Cases are also referred by the Medical Officer of the Municipal Ante-natal clinic.

If hospital treatment is necessary at the confinement the case is admitted to the St. Mary's Hospital, Manchester.

During the year 78 cases attended the clinic, 21 of whom made return visits. 14 cases were referred to St. Mary's Hospital, and 13 cases were admitted.

BRIEF ANALYSIS OF INFANT DEATH.

During the five years ended 1909, the percentage of deaths from prematurity was 21·1.

A decrease is shown in the five years period ending 1933 to 20·58%.

Deaths from cotngenital defects have increased from 3·62% in the five years ended 1909 o 7·82% in the five years ended 1933.

Deaths from debility and marasmus have been reduced considerably, and it is reasonable to suggest that this is due mainly to the activities of the Maternity and Child Welfare service.

In five years ended 1909	21·52%.
In five years ended 1933	13·83%.

The table of infantile mortality for 1933 shows that more than one-third of the deaths under one year occurred in the first four weeks of life—54 of the total 155. Practically one-quarter were under one week old—36 of the total 155. Of the 54 deaths under one month old 27 were due to premature birth and 27 to debility, marasmus, etc.

Summary of Visits Paid by the Health Visitors During the Year 1933

No. of primary visits to births	1410
,, visits to infants under one year	6163
,, ,, infants over one year and under two years	3701
,, ,, infants over two and under three years..	3229
,, ,, infants over three and under four years	2549
,, ,, infants over four and under five years ..	1714
,, ,, expectant mothers	489
,, ,, cases of Abortion	37
,, ,, cases of Measles	510
,, ,, cases of Pneumonia, &c.	83
,, ,, cases of Ophthalmia Neonatorum	2
,, ,, re deaths under one year	128
,, ,, still births	69
,, ,, to midwives	137
,, other visits	124

The following is a summary of the attendances at the Clinics during the year 1933.

Clinic.	*Children under 12 mths.*	*Children over 12 mths.*	*Total.*	*Mothers.*	*Expect. mothers.*	*Primary cases.*	*Cases examined by medical attendant.*
Central	2334	1014	3348	3169	730	460	2178
Platt Lane ..	1881	671	2552	2444	–	282	1265
Billinge Road ..	1317	456	1773	1689	–	182	1112
Worsley Mesnes	1329	559	1888	1759	–	173	1344
Woodhouse Lane.	1461	733	2194	2065	–	165	1102
Totals ..	8322	3433	11755	11126	730	1262	7001

MATERNAL MORTALITY.

Year.	*Wigan.*		*England and Wales.*	
1911 ..	4·12		4·91	
1912 ..	4·63		4·95	
1913 ..	3·93		3·87	
1914 ..	2·58	Average	5·12	Average
1915 ..	9·22	9-years	5·27	9-years
1916 ..	4·26	5·19	5·06	5·32
1917 ..	7·90		4·84	
1918 ..	4·77		7·60	
1919 ..	5·36		6·30	
1920 ..	2·87		5·46	
1921 ..	4·34		5·00	
1922 ..	2·91		5·16	
1923 ..	2·43		4·82	
1924 ..	6·00	Average	5·06	Average
1925 ..	3·70	10-years	5·15	10-years
1926 ..	4·51	4·66	5·14	5·26
1927 ..	5·33		5·43	
1928 ..	6·06		5·62	
1929 ..	8·45		5·82	

There is a reduction in the mortality rate this year. It is 7·08 as compared with the figure for 1932, which was 8.54. If the figures for the past twenty years are examined and compared with those of the rest of the country, it will be seen that the average figure for Wigan is less than that for the whole country. The rate for one year is not a true index of the position, there may be bad years and good years, as will be seen in reading down the list. It is the average over a considerable period that counts. Efforts should be made, however, not only in Wigan, but generally, to reduce this high maternal mortality. Far too many women die as a result directly or indirectly of child birth. With this object of reducing maternal mortality in Wigan, our ante-natgl scheme has been improved and developed by the appointment of a Consultant Obstetrician and the provision of hospital treatment at St. Mary's Hospital, Manchester.

Investigations, as requested by the Maternal Mortality Committee of the Ministry of Health, are made into all maternal deaths by the Medical Officer of Health, who interviews the general medical practitioner in charge of the cases. Confidential reports of such investigations are submitted to the Ministry without giving particulars of identification.

The Medical Officer in charge of Maternity and Child Welfare makes investigations in each case of Puerperal Fever notified.

SCHOOLS FOR MOTHERS.

230 classes were held during the year 1933, and 2,417 attendances were made by mothers.

Dr. Isobel M. Smith spends two-thirds of her time in Maternity and Child Welfare Work.

The following Centres are open from 2 p.m. to 4-30 p.m. on the days mentioned in the table below, for mothers and babies, and expectant mothers—

Centre.	*Days open.*
Wigan Central Clinic, Municipal Buildings, Library Street	Tuesday and Thursday of each week. School for Mothers on Wednesday.
Pemberton Clinic, 15, Billinge Road..	Monday of each week. School for Mothers on Thursday.
Platt Lane Mission Room	Friday of each week. School for Mothers on Tuesday.
Wesleyan Chapel, Worsley Mesnes ..	Wednesday each week, and also School for Mothers on that day.
St. Andrew's Mission Room, Woodhouse Lane.	Tuesday each week. School for mothers on Wednesday.

TABLE SHOWING THE NUMBER OF BIRTHS AND BIRTH-RATE TOGETHER WITH THE DEATHS OF INFANTS UNDER ONE YEAR OF AGE AND THE DEATH-RATE PER 1,000 BIRTHS IN EACH WARD IN THE BOROUGH FOR THE YEAR 1933.

Ward.	*Population 1931 Census.*	*No. of Births (A) Notified.*	*Birth Rate.*	*No. of Deaths of Infants under One Year.*	*Infantile. Death-rate per 1,000 Births.*
No. 1.—St. George	4281	88	20·55	6	68
No. 2.—Lindsay	5222	74	14·17	7	94
No. 3.—St. Catharine	6929	117	16·89	12	103
No. 4.—St. Patrick	8571	145	16·92	15	103
No. 5.—St. Thomas	4183	90	21·54	12	133
No. 6.—Poolstock	4775	91	19·05	18	198
No. 7.—Victoria	4745	107	22·55	14	131
No. 8.—St. Andrew's	14085	224	15·90	23	103
No. 9.—Swinley	7880	111	14·08	9	81
No. 10.—All Saints	2750	39	14·18	2	51
No. 11.—West Pemberton	3740	52	13·89	4	77
No. 12.—North Pemberton	6605	116	17·56	14	121
No. 13.—Central Pemberton	6129	77	12·57	6	78
No. 14.—South Pemberton	5462	89	16·29	13	146
Wigan	85150 (*B*)	1415 (*C*)	16·61	155	109
118 County Boroughs and Large Towns	—	—	—	—	67
England and Wales	—	—	—	—	64

(*A*) Does not include transferable births.

(*B*) Estimated population, 1st July, 1933.

(*C*) Total births corrected by transfers.

INFANT MORTALITY, 1933 NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER 1 YEAR OF AGE.
Name of District—Wigan County Borough.

Cause of Death.	Under 1 week	1–2 weeks	2–3 weeks	3–4 weeks	Total under 4 weeks	4 weeks & under 3 months	3 months & under 6 months	6months & under 9 months	9 months & under 12 m'ths	Total Deaths under 1 year
All Causes—Certified	36	5	7	6	54	25	30	27	19	155
Uncertified	..	..	..	..	..	.	..	..	..	..
Chicken-pox	..	..		..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	1	3	4
Scarlet Fever	..	..	..	..	..	..	..	..	..	..
Whooping Cough	..	..	..	..	..	..	..	..	1	1
Diphtheria and Croup	..	..	..	..	..	..	..	..	..	..
Tubercular Meningitis	..	..	..	..	..	..	..	1	..	1
Abdominal Tuberculosis	..	..	..	..	..	..	..	..	..	..
Other Tubercular Diseases	..	..	..	..	..	..	..	..	..	..
Meningitis (*not Tuberculous*)	..	..	..	..	..	..	1	..	..	1
Convulsions	1	..	..	..	1	1	1	..	1	4
Bronchitis	..	..	..	..	..	6	2	2	4	14
Pneumonia (*all forms*)	..	..	1	1	2	7	13	16	5	43
Diarrhœa	..	..	..	..	..	..	1	..	..	1
Enteritis	..	..	..	..	..	2	1	2	4	9
Gastritis	..	..	..	..	..	1	1	..	..	2
Syphilis	..	..	..	..	..	..	..	..	..	..
Rickets	..	.	..	..	..	..	..	..	..	..
Suffocation, overlying	..	..	..	..	..	..	1	..	..	1
Atelectasis	4	..	..	..	4	..	..	..	..	4
Congenital Malformations	4	1	2	2	9	2	1	..	..	12
Premature Birth	22	2	3	..	27	..	..	1	1	29
Atrophy, Debility and Marasmus	5	2	1	3	11	5	7	1	..	24
Other Causes	..	..	..	..	..	1	1	3	..	5
TOTAL	36	5	7	6	54	25	30	27	19	155

The following Table shows particulars of Notifications of Births received, which were notified by Doctors and Midwives :—

	Doctors and Parents.	*Miwives*	*Total.*
No. of Births notified	54	1,387	1,441
Percentage	3·75	96·25	100
No. of Medical Aid Forms received	—	540	540
No. of Still-births notified.. ..	15	54	69

TABLE SHOWING METHOD OF FEEDING OF INFANTS UNDER ONE YEAR OF AGE WHO DIED DURING 1933.

SAID TO BE—

41 Entirely Breast-fed.
12 Partly Breast-fed.
7 Condensed Milk.
32 Cow's Milk.
12 Dried Preparations.
31 No feeding (lived 1–2 days only).
20 Not known.

THE PUBLIC HEALTH (Notification of Puerperal Fever and Puerperal Pyrexia) REGULATIONS, 1926.

The scheme for the treatment of cases of Puerperal Fever and Puerperal Pyrexia was commenced in May, 1929 when a circular containing the following instructions was sent to all the Medical Practitioners of Wigan :—

1. If a practitioner desires a second opinion on such a case he may have the services of either Dr. Buchanan or Dr. Readman, after notifying the Medical Officer of Health to that effect.

2. If hospital treatment is desired, arrangements have been made with Wigan Infirmary to receive such cases whenever possible ; the request for such treatment to be made to the Medical Officer of Health.

3. Home nursing will be provided if available, on application to the Medical Officer of Health.

4. Bacteriological examinations can be arranged by application as above.

CASES OF PUERPERAL FEVER AND PUERPERAL PYREXIA NOTIFIED IN 1933.

	No. of cases notified.	*Treated at*				*Result.*
		Home.	*Wigan Infirmary.*	*Billinge Infirmary.*	*Private Nursing Home.*	
Puerperal Fever	2	1	1	–	–	Both Recovered.
Puerperal Pyrexia	7	6	1	–	–	All Recovered.

MIDWIVES' ACT, 1902.

Forty midwives were registered, as practising within the Borough all of whom have been regularly visited at their homes, and followed when out to their cases. Their bags and appliances were also examined.

Infantile Mortality.—The number of deaths of children under one year is, 155 or 109 per 1,000 births, and of children over one year and under five years 56, or 0·65 per 1,000 of the population.

These figures compare with 141 deaths under one year, a rate of 92 per 1,000 in 1932.

An analysis of these 155 deaths show that they may be grouped under the following headings :—

Congenital Debility, Malformation, and Premature Birth	70
Diarrhœa and Enteritis	14
Bronchitis	12
Pneumonia	43
Measles	4
Whooping Cough	1
Other causes	11

OPHTHALMIA NEONATORUM.

Year	Cases.			Vision Unimpair'd	Vision Impaired	Total Blindness
	No. Notified	Treated				
		At Home	In Hospital			
1933	2	-	2	1	1	—
1932	4	4	—	4	—	—
1931	9	9	—	9	—	—
1930	5	4	1	5	—	—
1929	8	8	—	8	—	—

Swabs of 2 cases notified during 1933 were sent for bacteriological examination. The Examation gave a positive result in one case, and negative in the other.

The following instructions are being carried out by midwives :—

1.—As soon as the head is born, thoroughly cleanse the eyelids and eyelashes with clean swabs, and warm boracic lotion, using separate swabs for each eye.

2.—When the baby is born, put one drop of a one per cent. solution of silver nitrate in the hollow between the nose and the eye, open the lids, and tilt the head and see that the fluid runs on to the surface of the eyeball. Repeat the same process with the other eye. Silver nitrate solution may be obtained free of charge by Midwives by applying to the Health Offices.

3.—Allow a few minutes to elapse and then swab with warm boracic lotion, using separate swabs as before.

4.—Don't use the silver nitrate solution again in the same case.

Every case of Ophthalmia Neonatorum is visited at once by a Health Visitor, a smear taken of discharge, if any, to be examined for gonococci or other organisms, and a report made to the Medical Officer of Health.

Cases are visited until cured.

RESULTS OF SUNLIGHT TREATMENT, 1933.

MATERNITY AND CHILD WELFARE CLINIC.

Disease	Under Treatm'nt 1st Jan., 1933	New Cases	Discharged			Ceased to Attend	Under Treatm'nt 31st Dec., 1933
			Cured	Much Improved	Transfer to Hospital		
Marasmus	—	—	—	—	—	—	—
Rickets..	6	4	1	—	—	6	3
Debility..	1	2	—	—	1	1	1
Others ..	3	1	—	2	—	1	1
	10	7	1	2	1	8	5

WELFARE OF THE BLIND.

In February, 1928, the Blind Welfare Committee, made a request that persons be examined by members of my Staff, with a view to determining whether they were too blind to perform work for which eyesight is essential.

This request was acceded to, and during the first six months of 1933-22 persons were examined. In June, 1933, Dr. Duthie was appointed for the examination of persons under the Blind Persons Act, and he examined 29 persons during 1933.

No use has been made of power of Local Authorities under Part VIII. Section 6 of the Public Health Act, 1925, to make arrangements for assisting in the prevention of blindness, and for the treatment of persons suffering from any disease or injury to the eyes, except the valuable work done in cases of Opthalmia Neonatorum described on page 83.

LIST OF PUBLIC GENERAL ACTS ADOPTED BY THE TOWN COUNCIL OF WIGAN, ALSO LOCAL ACTS, BYE-LAWS, AND REGULATIONS RELATING TO PUBLIC HEALTH.

Public General Acts :—

Small Dwellings Acquisition Act, 1899.

Infectious Diseases Prevention Act, 1890.

Public Health Acts (Amendment) Act, 1890 (Parts 3 and 5.)

Housing of The Working Classes Act, 1890.

Public Health Acts (Amendment) Act, 1907 (Sections 27, 33, 51, and Part 6).

Notification of Births Act, 1907.

Public Health Act, 1925 (Parts 2 to 5.)
Housing Act, 1930 (Parts 1, 17, 18, &c.)

Local Acts :—

Wigan Improvement Act, 1874 and 1880.
Local Government Board Provision Orders Confirmation (No. 19) Act, 1896, and No. 7 Act, 1888.
Wigan Corporation Acts, 1889, 1893, 1898, 1902, 1905, 1921, and 1933.

Bye-Laws with Respect to :—

Water Closets and Waste Water Closets, 27th November, 1905.

Houses Let-in-Lodgings, 7th December, 1887.

Common Lodging Houses, 1st July, 1891.

Slaughter Houses, 2nd September, 1891.

New Streets and Buildings, 21st September, 1903.
New Streets and Buildings, 6th January, 1892.
Alterations of Buildings, 6th January, 1892.
Nuisances, 7th December, 1887.
The Employment of Children, 8th March, 1921.

Tents, Vans, Sheds, and Similar Structures Used for Human Habitation, 11th November, 1913.

Sanitary Conveniences, 1st June, 1892.

Offensive Trades, 2nd September, 1914.

Spitting, 20th October, 1915.

Regulations with Respect to :—

Dairies, Cowsheds and Milkshops, 1st August, 1900.

Measles, 1925.

LEGAL PROCEEDINGS TAKEN DURING 1933.

Case No.	*Date.*	*Nature of Case.*	*Results.*
1.	Mar. 16.	Contravention of Imported Meat Regulations.	Pay costs.
2.	Mar. 23.	Contravention of Public Health (Meat) Regulations.	Fined £10.
3.	May 29.	Contravention of Public Health Act.	Order made for nuisance to be abated within 7 days and to pay costs. On July 10, fined 10s. for each day Court order had been disobeyed.
4.	June 12.	Contravention of Shop (Hours of Closing) Act, 1928. (Barbers' Closing Order).	Pay costs.
5.	Oct. 12.	Contravention of Bye-laws relating to Tents, Vans, and Sheds.	Fined £8 and costs.
6.	Oct. 23.	Slaughtering on unlicensed premises.	Fined £2.
7.	Oct. 23.	Aiding and abetting in case No. 6.	Fined 20s.
8.	Oct. 23.	Contravention of Shops (Hours of Closing) Act.	Fined 20s.
9.	Dec. 7.	Contravention of Public Health Act.	Orders made in each of four cases for the nuisances to be abated and to pay costs.
10.	Dec. 7.	Contravention of Public Health Act.	Order to abate nuisance within 14 days, and to pay costs.